aeromet

BLM LIBRARY
88064800

MONTHLY PROGRESS REPORT NO. 12
for the period February 1-28, 1977
to
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

1860 Lincoln St., Suite 900
Denver, CO 80203

Contract No. 68-01-1946

Utah U-a/U-b Tract

aeromet inc.

P.O. BOX FF NORMAN, OKLAHOMA 73070
405 329-2424

7700828

88064800

BLM Library
D-553A, Building 50
Denver Federal Center
P. O. Box 25047
Denver, CO 80225-0047

TN
859
.U82
W447
no.12

MONTHLY PROGRESS REPORT NO. 12

for the period February 1-28, 1977

to

ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

1860 Lincoln St., Suite 900

Denver, CO 80203

Contract No. 68-01-1946

by

Aeromet, Inc.

Box FF

Norman, OK 73070

Utah U-a/U-b Tract

1.0 INTRODUCTION

Low level temperature and wind data were collected for February, 1977 at Casper, Wyoming; near the Shell Oil Co. Colorado C-b Tract 25 miles west of Rio Blanco, Colorado; Craig, Colorado; Escalante and Hanksville Utah; Rock Springs, Wyoming; and the U-a/U-b Tract 5 miles south of Bonanza, Utah. The data collection was made using a 30 gm helium filled pilot balloon with a temperature sonde attached, a single theodolite and a TSR-2 receiver/recorder twice a day every other day. The observations were made ½ hour after sunrise and 1400L.

The pilot balloon had an ascent rate of 500 ft/min and it was tracked by a single theodolite for 12 minutes with the azimuth and elevation angles recorded every 30 seconds on a cassette tape recorder. The tape was transcribed to a pilot balloon form after the observation.

The temperature sonde operated at 403 MHz and the signal was received by a ground plane antenna at least 24 ft. AGL which was attached to the Aeromet, Inc. TSR-2 receiver/recorder. The TSR-2 receiver has a built-in Rustrak strip chart recorder and the temperature was recorded within the range from -50°C to +50°C. A baseline temperature calibration was performed with each T-Sonde by the adjustment of the recorded temperature to match the thermometer measured temperature next to the transmitting sonde. Once the calibration check was finished the balloon was released with the sonde attached and the temperature was recorded for at least 20 minutes. At the completion of each observation the data were mailed to Aeromet, Inc.

The Monthly Progress Report is divided into seven parts, one corresponding to each of the seven field sites. The collected temperature and wind data are accurate and have not been edited unless otherwise stated in the Pilot Balloon Summary Section. However, the obvious errors sometimes found in the recorded azimuth and elevation angles are corrected without mention. For example, the sequence of azimuth angles . . . 76.6, 75.3, 47.8, 73.8 . . . can be corrected without ambiguity. The more ambiguous errors are brought to the attention of the reader if editing has been performed, otherwise, the data are left as recorded and the filtering is left to the individual user. An example is the wind profile for Hanksville on 06/29/76 at 1300 MST found in the Monthly Progress Report No. 4. The azimuth angles starting 30 seconds after the launch and incremented by the same are as follows . . . 109.0, 110.0, 110.0, 281.0, 280.0, 282.0 . . . , while the corresponding elevation angles are as follows, . . . 60.0, 57.6, 58.7, 58.6, 52.7, 44.3 . . . . The wind speed and direction change dramatically over the interval as can be seen in the report since these data were not edited.

2.0 DATA SUMMARY

2.1 Utah U-a/U-b Tract Field Summary

No major problems existed at the site for the month of February. The cold winter weather makes the tuning of the receiver to the temperature sonde frequency more difficult. The receiver tends to break lock on the sonde more often requiring temperature data interpolation.

The observer continued to do an excellent job and attempted 97% of the scheduled pilot balloon launches resulting in 90% recovery of the temperature data and 93% recovery of the wind data. Poor weather conditions contributed to the 4% loss in wind data while faulty sondes contributed to the 7% loss in temperature data.

2.2 Mixing Layer Height

The average mixing layer height was computed for the morning and afternoon based on the morning and 1400L temperature soundings. The balloon release ½ hour after sunrise is near enough to the minimum temperature to assume the correctness of the calculated mixing layer heights. The afternoon balloon release is generally not at the time of maximum heating and the user of the mixing layer height data must be aware that minor changes in the calculated values can be expected. Without equipping the field sites with minimum/maximum thermometers the extrapolation of the afternoon data can not be justified in establishing a data base for statistical analysis. The approximation of the afternoon maximum temperature would be a "calculated guess" for there are: 1) local effects which are to be determined and would be filtered out with extrapolation, 2) mountain effects which alter the lower 1500m (e.g. downslope effects), and 3) meteorological effects which can alter the expected change in the sounding (e.g. advection, moisture, etc.).

It is felt that to better define the mixing layer height that a variety of "heat island" effects should be viewed. The rigorous method would be to define 15 "heat island" effects ranging from 0 to 14°C and let the user decide which would best serve his needs. However, for these analysis 0°, +5° and +10° "heat island" effects are calculated and listed for the morning and afternoon soundings in the table Average Mixing Layer Height.

The symbol N/D means that no mixing layer height was defined and sfc is the abbreviation for surface.

2.3 Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification schemes. Only the stations listed prior to the table classifying the inversions were used in the calculations.

3.0 DATA PROCESSING

3.1 Printed and Plotted Output

Wind speeds and directions are computed from the azimuth and elevation angles measured while tracking the balloon with the theodolite. The wind speed and direction are plotted versus height and printed out at 30 second intervals. The printed output includes the AGL and MSL height of the calculated wind value and the orthogonal components of the wind. The wind profile is also punched on computer cards at 30 second intervals.

The temperature data are processed and plotted with the temperature and the lapse rate per 300 meters versus height at 15 second intervals. Tic marks are placed on the temperature plot at significant levels. A solid line to the right side of the plot indicates the data for that layer are interpolated temperature values. The temperature data are also printed out and punched on cards. The asterisk beside a height value indicates a significant level while a "?" indicates interpolated data.

The temperature data are also processed to produce for each site a monthly summary of inversion layers and lapse rates within the inversions and from the inversion base to the surface by means of the Holzworth classification scheme for inversions (Holzworth, G.C., 1974: "Climatological Data on Atmospheric Stability in the United States" Paper presented at the American Meteorological Society Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974. Santa Barbara, California.)

The temperature and wind data are processed together to produce for each site a monthly average bivariate frequency distribution of wind direction versus wind speed represented in the 500m layer adjacent to the ground. The distribution is presented by the six Pasquill stability classes (A-F) and a summary independent of stability. If the $\Delta T/100m$ criterion is met but the wind speed criterion is not met, then the

STABILITY CLASS	ΔT (°C/100m)	WIND SPEED
A	<-1.9	≤ 2
B	-1.9 - -1.7	≤ 5
C	-1.7 - -1.5	≤ 6
D	-1.5 - -0.5	ALL SPEEDS
E	-0.5 - 1.5	≤ 5
F	>1.5	≤ 3

wind data are checked against the criterion for the next stability class, always cascading to the D stability class. Once the wind speed criterion is met the data are classified under the new stability class even though now the lapse rate exceeds the class criterion. For example,

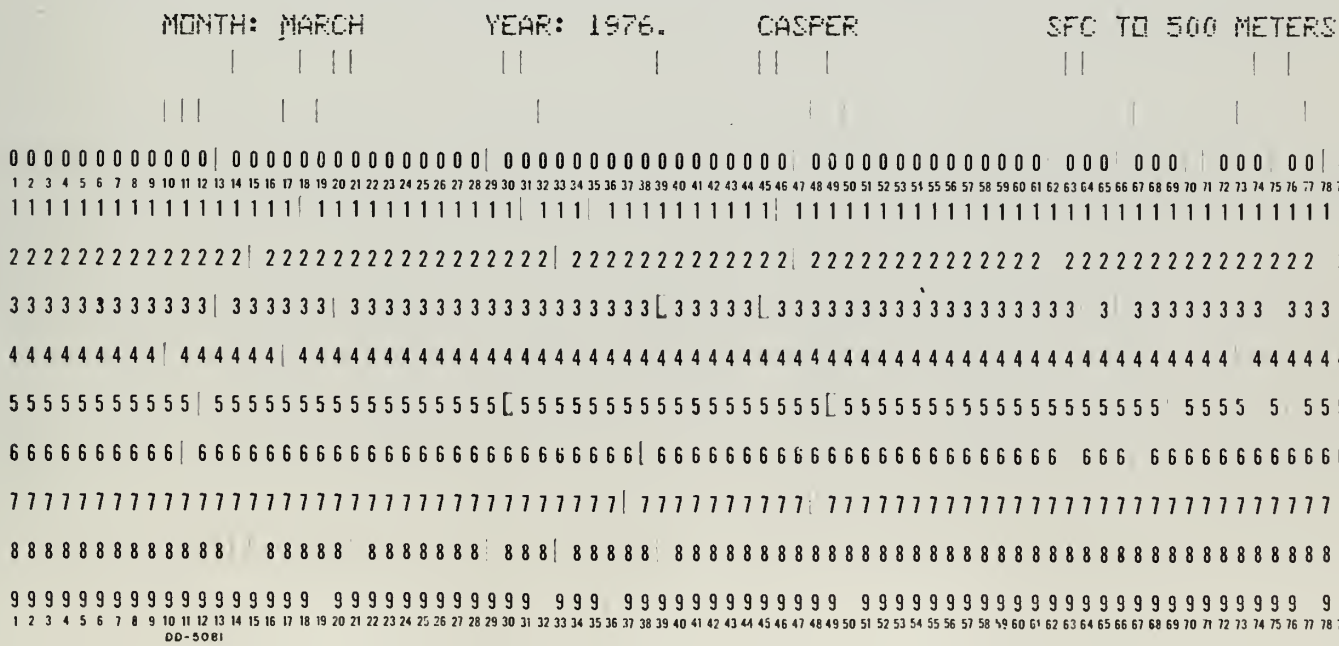
if the $\Delta T/100m$ value is 1.7 and the wind speed is 7 m/s, the lapse rate criterion is met for the stability class F, however the wind speed criterion is exceeded. The wind speed is greater than the 5 m/s maximum limit for class E but falls within the criterion of class D, which includes all wind speeds. As a result the observational data with a ΔT value of 1.7°C/100 m and a wind speed value of 7 m/s are classified under stability class D, not class F.

The data are also punched on computer cards in a format compatible with the STAR PROGRAM of the National Climatic Center, NOAA, U.S. Department of Commerce.

3.2 Punched Output

The punched temperature and wind data for each observation are categorized into four groups, each separated by a blank card. The first group begins with a header card listing the station name (3A4), the station elevation in meters (I4), the month, date and year (I6), the observation time (I4), the time zone (A3), the balloon ascent rate in feet per minute (I3), the sampling interval in seconds (I2), the temperature error in °C (F5.1), the T-Sonde I.D. number (I5) and the surface wind speed in kts and direction (2F6.1). A surface wind speed of 180.0 KTS indicates missing surface wind data. The series of cards prior to the first blank card include on each card the elapse time in minutes (2X,F5.1), the height of the balloon in meters AGL (4X,F5.0), the height of the balloon in meters MSL(4X,F5.0), the temperature in °C (4X,F6.2), the change in temperature between standard or significant levels (2X,F6.2), the lapse rate per 300m (2X,F6.2), the difference in the lapse rate per 300m and the dry adiabatic lapse rate per 300m (2X,F6.2), the wind speed in m/s if known (4X,F5.1), and the wind direction if known (3X,F5.0). The cards following the first blank card include on each card the elapse time in minutes (2X,F5.1), the height in meters AGL (4X,F5.0), the height in meters MSL (4X,F5.0), the u-component of the wind in m/s (4X,F6.1), the v-component of the wind in m/s (6X,F6.1), the wind speed in m/s (7X,F5.1), the wind direction (6X,F5.0), the elevation angle in degrees (F5.1) and the azimuth angle in degrees (F5.1). The cards after the second blank card include a header card like before and a series of cards with four groups of the following on each card; the height in meters AGL (F6.1), the temperature in °C (F6.2), the lapse rate °C/300m (F6.2) and a blank space (1X). The cards after the third blank card include a header card the same as described earlier, eight cards with the original digitized temperature data and a flag to indicate interpolated data (20(F3.1,I1)), five cards with the elevation angle in degrees (16F5.1), and five cards with the azimuth angle in degrees (16F5.1). The temperature data are in degrees Celsius and have 50°C added to each value. An elevation angle of 180° indicates a missing azimuth and elevation angle value.

The punched output from the bivariate frequency distribution calculations include a header card as illustrated below,



and the punched distribution data for each wind direction under each stability class in agreement with the "star" output. The stability classes are number coded as follows:

STABILITY CLASS	NUMBER CODE
A	1
B	2
C	3
D	4
E	5
F	6
Independent of Stability	7

The station I.D. numbers are as follows:

STATION	I.D. NUMBER
Casper, Wyoming	1
Colorado C-b Tract	2
Craig, Colorado	3
Escalante, Utah	4
Hanksville, Utah	5
Rock Springs, Wyoming	6
Utah U-a/U-b Tract	7

The month and season number codes are as follows:

MONTH	1-12
SEASON	13 = DJF
	14 = MAM
	15 = JJA
	16 = SON
ANNUAL	17

PILOT BALLOON SUMMARY
Utah U-a/U-b
February, 1977

February 2	0702	No wind observations made due to snow.
	1352	
February 4	0716	Temperature values were interpolated over the interval from 8 to 12 1/2 minutes.
	1347	
February 6	0721	Temperature values were interpolated over the intervals from 1 3/4 to 9 minutes and from 25 3/4 to 27 3/4 minutes.
	1358	No temperature data were collected because of a failure in the sonde.
February 8	0727	Temperature values were interpolated over the interval from 3 3/4 to 9 minutes.
	1356	
February 10	MORN	No data received because of a vehicle breakdown.
	1354	
February 12	0719	
	1350	Temperature values were interpolated over the interval from 3 3/4 to 12 3/4 minutes.
February 14	0712	No temperature data due to sonde failure. Balloon was lost after 11 minutes.
	1401	
February 16	0706	Temperature values were interpolated over the interval from 4 3/4 to 12 1/4 minutes.
	1349	Temperature values were interpolated over the interval from 6 1/4 to 9 3/4 minutes.

PILOT BALLOON SUMMARY
Utah U-a/U-b
February, 1977

February 18	0714	
	1356	
February 20	0659	Temperature values were interpolated over the interval from 2 1/2 to 7 minutes.
	1352	
February 22	0701	Balloon was lost in the clouds after 6 1/2 minutes.
	1353	Balloon was lost in a snow shower after 6 1/2 minutes.
February 24	0656	
	1353	
February 26	0702	Temperature values were interpolated over the interval from 8 1/2 to 12 1/4 minutes.
	1356	Temperature values were interpolated over the interval from 10 1/2 to 13 1/4 minutes.
February 28	0652	
	1350	

CLOUD COVER AND SIGNIFICANT WEATHER

Utah U-a/U-b

February, 1977

DATE	MORNING	AFTERNOON
2	overcast, snow	broken
4	scattered	scattered
6	scattered	scattered
8	clear	clear
10		clear
12	scattered	scattered
14	scattered	scattered
16	scattered	broken
18	scattered	scattered
20	broken	clear
22	broken	overcast, light snow ALQDS
24	scattered	broken
26	scattered	broken
28	scattered	broken

AVERAGE MIXING LAYER HEIGHT

Utah U-a/U-b Tract

February, 1977

HEIGHT IN METERS

	MORNING			AFTERNOON		
DATE	0°	+5°	+10°	0°	+5°	+10°
2	100m	1400m	2650m	200m	1200m	1750m
4	50m	150m	550m	100m	750m	1250m
6	sfc	100m	450m			
8	sfc	150m	250m	550m	700m	950m
10				500m	900m	1600m
12	sfc	150m	300m	400m	1000m	1750m
14				200m	1150m	2000m
16	sfc	100m	250m	50m	550m	1600m
18	sfc	150m	400m	850m	1500m	3500m
20	sfc	150m	400m	sfc	700m	1500m
22	950m	N/D	N/D	300m	3700m	N/D
24	50m	3500m	N/D	650m	3300m	3550m
26	sfc	200m	950m	500m	2750m	3200m
28	sfc	100m	700m	350m	1200m	2550m

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3969

DATE 02/02/77 TIME 07:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
114.	152.	0.0	-0.59

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3972

DATE 02/02/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	76.	0.24	-1.00

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3975

DATE 02/04/77 TIME 07:16MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	1105.	0.58	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3978

DATE 02/04/77 TIME 13:47MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	191.	0.75	-1.13

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3981

DATE 02/06/77 TIME 07:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	1410.	0.42	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3976

DATE 02/08/77 TIME 07:27MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	1410.	0.79	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3979

DATE 02/08/77 TIME 13:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	841.	0.39	-2.00

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3970

DATE 02/10/77 TIME 13:54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
354.	782.	0.27	-1.28

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3960

DATE 02/12/77 TIME 07:19MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	991.	0.71	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3963

DATE 02/12/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
116.	154.	1.23	-1.77

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3982

DATE 02/14/77 TIME 14:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
191.	229.	0.0	-0.83

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4048

DATE 02/16/77 TIME 07:06MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	686.	1.24	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4050

DATE 02/16/77 TIME 13:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	152.	0.48	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4054

DATE 02/18/77 TIME 07:14MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	533.	1.21	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4049

DATE 02/18/77 TIME 13:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
831.	1288.	0.04	-1.03

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4051

DATE 02/20/77 TIME 06:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	1219.	0.59	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4053

DATE 02/20/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	76.	1.19	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4055

DATE 02/22/77 TIME 07:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
191.	235.	0.46	-1.61

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4041

DATE 02/22/77 TIME 13:53MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
314.	391.	0.0	-0.91

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4042

DATE 02/24/77 TIME 06:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	38.	0.0	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4045

DATE 02/24/77 TIME 13:53MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
669.	822.	0.43	-0.93

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4040

DATE 02/26/77 TIME 07:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	381.	1.19	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4043

DATE 02/26/77 TIME 13:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	128.	0.73	-2.13

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4044

DATE 02/28/77 TIME 06:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	267.	2.05	0.0

MONTH: FEBRUARY YEAR: 1977. UTAH UAUB ELEV 1585 METERS

HOLZWORTHIS CLASSIFICATION SCHEME FOR INVERSIONS
MODIFIED TO SHOW TOTAL NUMBER INSTEAD OF PERCENT

THICKNESS (METERS)	INVERSION BASE HEIGHT (M) SFC	1-100	101-250	251-500	501-750	751-1000	1000-1500	1501-2000	2001-2500	2501-3000	TOTAL
1 - 100	2	2	4	1	0	0	0	0	0	0	9
101 - 250	1	1	0	0	1	0	0	0	0	0	3
251 - 500	2	0	0	1	0	1	0	0	0	0	4
501 - 750	2	0	0	0	0	0	0	0	0	0	2
751 - 1000	1	1	0	0	0	0	0	0	0	0	2
1001 - 1500	4	0	0	0	0	0	0	0	0	0	4
> 1500	0	0	0	0	0	0	0	0	0	0	0
INV TOTAL	12	4	4	2	1	1	0	0	0	0	24
DT/DZ 5		0	0	0	0	0	0	0	0	0	0
FROM INV 4		0	1	0	0	0	0	0	0	0	1
BASE 3		2	1	1	1	1	0	0	0	0	6
TO 2		0	0	1	0	0	0	0	0	0	1
SFC 1		2	2	0	0	0	0	0	0	0	4
NO INV TOT		0	0	0	0	0	0				
DT/DZ FOR 5		0	0	0	0	0	0				
SAME 4		0	0	0	0	0	0				
LAYERS 3		0	0	0	0	0	0				
AS INV 2		0	0	0	0	0	0				
BASE 1		0	0	0	0	0	0				

DT/DZ (DEG C)/100M

5= 0.00 TO -0.40

4=-0.41 TO -0.80

3=-0.81 TO -1.20

2=-1.21 TO -1.60

1=<-1.60

MONTH: FEBRUARY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE A STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 24 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: FEBRUARY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE B STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 24 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: FEBRUARY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE C STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 24 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: FEBRUARY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.18	0.0	0.09	0.09	0.0	0.0	5.1	0.36
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.09	0.09	0.18	0.0	0.0	0.0	5.6	0.36
NW	0.18	0.09	0.0	0.0	0.0	0.0	3.0	0.27
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	1.9	3.9	8.0	10.6	0.0	0.0		0.0
TOTAL	0.45	0.18	0.27	0.09	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE D STABILITY CLASS IS 0.48

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 24 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: FEBRUARY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.30	0.20	0.0	0.0	0.0	0.0	2.3	0.50
S	0.0	0.20	0.0	0.0	0.0	0.0	4.0	0.20
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.10	0.0	0.0	0.0	0.0	4.1	0.10
WSW	0.10	0.0	0.0	0.0	0.0	0.0	0.7	0.10
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.10	0.0	0.0	0.0	0.0	4.2	0.10
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	1.2	4.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.40	0.60	0.0	0.0	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE E STABILITY CLASS IS 0.43

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 24 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: FEBRUARY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.50	0.0	0.0	0.0	0.0	0.0	0.9	0.50
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.50	0.0	0.0	0.0	0.0	0.0	1.5	0.50
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	1.2	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	1.00	0.0	0.0	0.0	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE F STABILITY CLASS IS 0.09

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 24 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: FEBRUARY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.04	0.0	0.0	0.0	0.0	0.0	0.9	0.04
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.17	0.09	0.0	0.0	0.0	0.0	2.2	0.26
S	0.0	0.09	0.0	0.0	0.0	0.0	4.0	0.09
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.04	0.0	0.0	0.0	0.0	4.1	0.04
WSW	0.13	0.0	0.04	0.04	0.0	0.0	4.3	0.22
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.04	0.09	0.09	0.0	0.0	0.0	5.3	0.22
NW	0.09	0.04	0.0	0.0	0.0	0.0	3.0	0.13
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	1.5	4.0	8.0	10.6	0.0	0.0		0.0
TOTAL	0.48	0.35	0.13	0.04	0.0	0.0		1.00

NORMALIZED FREQUENCY DISTRIBUTION INDEPENDENT OF STABILITY

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 24 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3969

DATE 02/02/77 TIME 07:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-2.63		0.0		1.0	45.
1.0	150	1735	-3.31	-0.68	-0.57	2.36	M	M
2.0	300	1885	-3.89	-0.58	-1.53	1.40	M	M
2.7	415.	2000.	-4.28	-0.39	-2.30	0.63	M	M
3.3	500	2085	-5.43	-1.15	-1.92	1.01	M	M
5.8	915.	2500.	-8.09	-2.66	-0.78	2.15	M	M
9.1	1415.	3000.	-11.65	-3.56	-1.56	1.37	M	M
15.6	2415.	4000.	-16.94	-5.30	-0.79	2.14		
21.5	3415.	5000.	-24.94	-7.99	-5.42	-2.49		
27.1	4415.	6000.	-31.08	-6.14	-4.25	-1.32		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3969

DATE 02/02/77 TIME 07:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.7	-0.7	1.0	45.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3972

DATE 02/02/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		3.79		0.0		5.1	270.
0.9	150	1735	1.94	-1.85	-1.68	1.24	3.8	276.
1.9	300	1885	2.18	0.24	0.0	2.93	5.3	284.
2.7	415.	2000.	2.36	0.37	-1.69	1.24	4.7	293.
3.2	500	2085	2.27	-0.29	-4.90	-1.97	2.6	311.
5.6	915.	2500.	-1.09	-2.97	-3.23	-0.30	2.3	4.
8.8	1415.	3000.	-2.25	-1.56	-0.19	2.74	10.4	43.
14.2	2415.	4000.	-8.20	-5.94	-1.55	1.38		
20.6	3415.	5000.	-14.34	-6.14	-5.50	-2.57		
26.6	4415.	6000.	-19.66	-5.32	-3.97	-1.05		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3972

DATE 02/02/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	5.1	0.0	5.1	270.
0.5	76.	1661.	4.0	0.7	4.1	260.
1.0	162.	1747.	3.8	-0.6	3.8	279.
1.5	238.	1823.	5.0	-0.9	5.1	280.
2.0	314.	1899.	5.2	-1.4	5.4	285.
2.5	390.	1975.	5.1	-2.1	5.6	292.
3.0	467.	2052.	2.6	-1.2	2.9	294.
3.5	543.	2128.	1.0	-2.0	2.2	333.
4.0	653.	2238.	1.2	-2.2	2.5	332.
4.5	739.	2324.	-0.5	-1.4	1.5	21.
5.0	815.	2400.	0.5	-1.1	1.2	336.
5.5	891.	2476.	-0.1	-1.7	1.7	3.
6.0	975.	2560.	-0.5	-4.0	4.0	7.
6.5	1064.	2649.	-3.4	-4.0	5.2	40.
7.0	1146.	2731.	-6.4	-5.6	8.5	49.
7.5	1222.	2807.	-5.4	-5.6	7.8	44.
8.0	1298.	2883.	-6.5	-6.4	9.1	45.
8.5	1375.	2960.	-6.9	-6.9	9.8	45.
9.0	1451.	3036.	-7.3	-8.3	11.0	41.
9.5	1527.	3112.	-7.3	-9.4	11.9	38.
10.0	1603.	3188.	-7.2	-9.8	12.2	36.
10.5	1679.	3264.	-7.1	-10.5	12.7	34.
11.0	1756.	3341.	-7.1	-10.8	12.9	33.
11.5	1832.	3417.	-8.1	-12.1	14.5	34.
12.0	1908.	3493.	-9.3	-12.8	15.8	36.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3975

DATE 02/04/77 TIME 07:16MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-10.46		0.0		5.1	135.
1.0	150	1735	-7.04	3.43	6.00	8.93	3.8	158.
1.3	* 190	1775	-6.72		4.25	7.18		
2.0	300	1885	-6.23	0.81	1.54	4.47	0.8	199.
2.7	415.	2000.	-5.94	0.39	0.0	2.93	1.2	241.
3.3	500	2085	-5.94	-0.10	0.77	3.70	0.7	167.
6.0	915.	2500.	-4.48	1.28	0.77	3.69	4.3	33.
9.3	1415.	?3000.	-6.03	-1.37	-1.54	1.39	10.1	16.
15.8	2415.	4000.	-9.38	-3.35	1.17	4.09		
16.3	*2476	4061	-9.67		1.17	4.09		
17.8	*2705	4290	-7.70		0.39	3.31		
22.3	3415.	5000.	-12.05	-2.67	-2.54	0.39		
28.8	4415.	6000.	-18.95	-6.91	-1.98	0.94		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3975

DATE 02/04/77 TIME 07:16MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-3.6	3.6	5.1	135.
0.5	76.	1661.	-2.4	3.6	4.3	146.
1.0	152.	1737.	-1.4	3.5	3.8	158.
1.5	229.	1814.	-0.5	0.7	0.8	143.
2.0	305.	1890.	0.3	0.7	0.8	203.
2.5	381.	1966.	1.4	0.6	1.5	247.
3.0	457.	2042.	0.7	0.5	0.9	234.
3.5	533.	2118.	-0.5	0.2	0.6	115.
4.0	610.	2195.	-0.7	1.1	1.3	149.
4.5	686.	2271.	-2.6	-0.9	2.7	70.
5.0	762.	2347.	-2.2	-2.9	3.7	37.
5.5	838.	2423.	-2.5	-3.5	4.3	35.
6.0	914.	2499.	-2.4	-3.6	4.3	33.
6.5	991.	2576.	-1.3	-4.7	4.8	15.
7.0	1067.	2652.	-2.3	-6.2	6.6	20.
7.5	1143.	2728.	-2.5	-6.5	7.0	21.
8.0	1219.	2804.	-2.5	-7.2	7.6	19.
8.5	1295.	2880.	-2.9	-8.1	8.6	20.
9.0	1372.	2957.	-3.2	-8.8	9.4	20.
9.5	1448.	3033.	-2.4	-10.3	10.6	13.
10.0	1524.	3109.	-1.2	-12.8	12.8	5.
10.5	1600.	3185.	-0.4	-14.2	14.2	1.
11.0	1676.	3261.	-1.3	-13.0	13.1	6.
11.5	1753.	3338.	-2.1	-11.8	12.0	10.
12.0	1829.	3414.	-1.9	-10.5	10.7	10.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3981

DATE 02/06/77 TIME 07:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN		HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
		SFC		-12.35		0.0		2.6	135.
1.0		150	1735	-7.91	4.44	5.62	8.54	1.4	149.
1.3	*	190	1775	-7.02		2.90	5.83		
2.0	?	300	1885	-6.92	0.99	0.19	3.12	0.9	142.
2.7		415.	?2000.	-6.92	0.0	0.19	3.12	0.9	108.
3.3	?	500	2085	-6.82	0.10	0.0	2.93	0.5	111.
6.0		915.	?2500.	-6.63	0.20	0.19	3.12	6.9	56.
9.3		1415.	3000.	-6.82	-0.19	-1.93	1.00	6.5	27.
15.8		2415.	4000.	-10.66	-3.84	-2.53	0.40		
22.3		3415.	5000.	-17.24	-6.59	-0.99	1.94		
28.1		4415.	6000.	-26.16	-8.91	-3.21	-0.29		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3981

DATE 02/06/77 TIME 07:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.8	1.8	2.6	135.
0.5	76.	1661.	-1.1	3.0	3.2	160.
1.0	152.	1737.	-0.7	1.1	1.3	149.
1.5	229.	1814.	0.4	0.8	0.9	204.
2.0	305.	1890.	-0.6	0.7	1.0	138.
2.5	381.	1966.	-0.5	0.7	0.9	143.
3.0	457.	2042.	-0.9	-0.4	1.0	65.
3.5	533.	2118.	-0.1	0.2	0.2	146.
4.0	610.	2195.	-0.4	-0.2	0.5	60.
4.5	686.	2271.	-2.0	-1.2	2.3	60.
5.0	762.	2347.	-3.8	-2.0	4.3	62.
5.5	838.	2423.	-4.7	-2.5	5.3	62.
6.0	914.	2499.	-5.7	-3.9	6.9	56.
6.5	991.	2576.	-3.7	-3.9	5.4	44.
7.0	1067.	2652.	-2.2	-4.4	4.9	27.
7.5	1143.	2728.	-3.7	-4.8	6.0	37.
8.0	1219.	2804.	-3.9	-5.4	6.7	35.
8.5	1295.	2880.	-3.7	-6.1	7.1	31.
9.0	1372.	2957.	-3.1	-5.7	6.5	29.
9.5	1448.	3033.	-2.8	-5.8	6.5	26.
10.0	1524.	3109.	-2.7	-6.3	6.8	23.
10.5	1600.	3185.	-2.4	-7.1	7.5	19.
11.0	1676.	3261.	-1.9	-7.7	8.0	14.
11.5	1753.	3338.	-1.5	-8.6	8.7	10.
12.0	1829.	3414.	-1.6	-9.1	9.3	10.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3973

DATE 02/06/77 TIME 13:58MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		M				1.5	270.
1.0	150	1735					2.0	267.
2.0	300	1885					3.4	277.
2.7	415.	2000.					3.1	309.
3.3	500	2085					3.0	326.
6.0	915.	2500.					3.9	52.
9.3	1415.	3000.					6.0	4.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3973

DATE 02/06/77 TIME 13:58MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.5	0.0	1.5	270.
0.5	76.	1661.	2.7	1.3	3.0	245.
1.0	152.	1737.	2.0	0.1	2.0	267.
1.5	229.	1814.	2.9	0.5	2.9	259.
2.0	305.	1890.	3.4	-0.5	3.4	278.
2.5	381.	1966.	2.6	-1.7	3.1	303.
3.0	457.	2042.	2.1	-2.2	3.1	316.
3.5	533.	2118.	1.3	-2.7	2.9	335.
4.0	610.	2195.	0.3	-2.6	2.6	353.
4.5	686.	2271.	-0.5	-3.1	3.2	9.
5.0	762.	2347.	-2.4	-3.0	3.9	39.
5.5	838.	2423.	-2.0	-3.7	4.3	29.
6.0	914.	2499.	-3.1	-2.4	3.9	52.
6.5	991.	2576.	-3.2	-0.7	3.3	78.
7.0	1067.	2652.	-2.3	-2.5	3.3	43.
7.5	1143.	2728.	-1.8	-5.1	5.4	19.
8.0	1219.	2804.	-0.7	-5.6	5.6	7.
8.5	1295.	2880.	-0.1	-6.0	6.0	1.
9.0	1372.	2957.	-0.2	-5.5	5.5	2.
9.5	1448.	3033.	-0.6	-6.4	6.4	5.
10.0	1524.	3109.	-1.3	-8.1	8.2	9.
10.5	1600.	3185.	-1.5	-7.6	7.8	11.
11.0	1676.	3261.	-1.1	-6.2	6.3	10.
11.5	1753.	3338.	-0.2	-4.7	4.7	3.
12.0	1829.	3414.	-0.7	-3.4	3.5	12.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3976

DATE 02/08/77 TIME 07:27MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-12.85		0.0		2.1	135.
1.0	150	1735	-9.19	3.66	8.32	11.24	0.9	105.
2.0	300	1885	-5.36	3.83	2.30	5.23	1.7	17.
2.7	415.	2000.	-3.80	1.55	4.97	7.89	2.3	11.
3.3	500	2085	-2.23	1.57	3.43	6.36	1.3	175.
3.5	* 533	2118	-2.15		3.43	6.36		
6.0	915.	?2500.	-1.96	0.28	0.19	3.12	4.6	212.
9.3	1415.	3000.	-2.05	-0.09	-0.57	2.36	5.6	256.
15.8	2415.	4000.	-4.77	-2.72	-2.30	0.63		
22.4	3415.	5000.	-7.90	-3.13	-2.51	0.41		
28.7	4415.	6000.	-14.94	-7.04	-3.34	-0.41		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3976

DATE 02/08/77 TIME 07:27MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.5	1.5	2.1	135.
0.5	76.	1661.	-1.0	0.7	1.3	125.
1.0	152.	1737.	-0.9	0.2	0.9	104.
1.5	229.	1814.	-0.6	0.1	0.6	98.
2.0	305.	1890.	-0.4	-1.8	1.8	12.
2.5	381.	1966.	-0.4	-2.5	2.5	10.
3.0	457.	2042.	-0.4	-1.9	1.9	12.
3.5	533.	2118.	0.7	-0.4	0.8	302.
4.0	610.	2195.	-1.1	-2.1	2.4	26.
4.5	686.	2271.	-2.2	-1.2	2.5	62.
5.0	762.	2347.	0.9	2.9	3.0	197.
5.5	838.	2423.	2.3	2.8	3.7	220.
6.0	914.	2499.	2.5	3.9	4.6	212.
6.5	991.	2576.	1.7	4.6	4.9	201.
7.0	1067.	2652.	1.0	3.9	4.0	195.
7.5	1143.	2728.	1.7	3.4	3.8	206.
8.0	1219.	2804.	2.8	2.7	3.9	227.
8.5	1295.	2880.	4.3	3.2	5.4	233.
9.0	1372.	2957.	5.6	2.1	6.0	249.
9.5	1448.	3033.	5.2	0.7	5.3	262.
10.0	1524.	3109.	4.9	-0.0	4.9	271.
10.5	1600.	3185.	5.6	0.0	5.6	270.
11.0	1676.	3261.	6.4	-0.5	6.4	274.
11.5	1753.	3338.	6.9	-0.3	6.9	273.
12.0	1829.	3414.	7.3	-0.6	7.3	274.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3979

DATE 02/08/77 TIME 13:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.86		0.0		4.1	270.
0.8	150	1735	6.70	-2.16	-3.33	-0.40	6.2	254.
1.6	300	1885	5.58	-1.11	-2.97	-0.05	1.3	264.
2.2	415.	2000.	4.07	-1.47	-1.49	1.44	3.1	336.
2.8	500	2085	3.87	-0.24	0.75	3.67	3.5	331.
3.3	* 574	2159	3.22		2.05	4.98		
5.0	* 840	2425	10.25		1.83	4.76		
5.5	915.	2500.	9.32	5.46	-2.37	0.56	4.3	234.
8.1	1415.	3000.	5.21	-3.44	-2.59	0.33	10.3	226.
14.5	2415.	4000.	3.79	-2.10	-0.75	2.18		
20.8	3415.	5000.	0.35	-3.44	-0.76	2.17		
26.7	4415.	6000.	-4.76	-5.11	-7.87	-4.94		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3979

DATE 02/08/77 TIME 13:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	4.1	0.0	4.1	270.
0.5	76.	1661.	4.8	1.3	5.0	255.
1.0	203.	1788.	6.7	2.0	7.0	254.
1.5	292.	1877.	1.2	0.3	1.2	255.
2.0	375.	1960.	0.6	-2.1	2.2	345.
2.5	460.	2045.	2.3	-3.3	4.0	325.
3.0	536.	2121.	1.3	-2.8	3.1	336.
3.5	612.	2197.	-0.2	-1.6	1.6	5.
4.0	688.	2273.	1.2	0.4	1.3	250.
4.5	765.	2350.	2.0	1.8	2.7	228.
5.0	841.	2426.	3.0	1.7	3.5	241.
5.5	917.	2502.	3.5	2.6	4.3	234.
6.0	993.	2578.	4.2	4.0	5.8	226.
6.5	1069.	2654.	5.0	5.3	7.3	223.
7.0	1146.	2731.	5.8	6.3	8.6	223.
7.5	1242.	2827.	5.8	6.4	8.6	222.
8.0	1403.	2988.	7.6	7.3	10.5	226.
8.5	1505.	3090.	6.0	6.3	8.7	224.
9.0	1581.	3166.	4.6	5.3	7.0	221.
9.5	1657.	3242.	4.7	4.7	6.7	225.
10.0	1733.	3318.	5.9	4.2	7.3	234.
10.5	1810.	3395.	5.8	4.0	7.0	235.
11.0	1886.	3471.	6.3	3.9	7.4	238.
11.5	1962.	3547.	6.5	4.3	7.8	237.
12.0	2038.	3623.	6.5	5.3	8.3	231.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3970

DATE 02/10/77 TIME 13:54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.39		0.0		2.6	270.
0.7	150	1735	6.35	-2.04	-5.57	-2.64	2.8	274.
1.3	300	1885	4.01	-2.34	-2.23	0.69	3.7	305.
1.9	415.	2000.	3.98	-0.03	-1.31	1.62	3.3	328.
2.3	* 477	2062	2.84		-0.37	2.56		
2.4	500	2085	3.21	-0.78	0.56	3.49	2.1	80.
3.3	* 629	2214	5.02		1.86	4.79		
5.1	915.	2500.	4.26	1.13	0.0	2.93	3.0	341.
8.4	1415.	3000.	3.41	-0.93	-2.62	0.31	4.7	44.
14.7	2415.	4000.	0.93	-2.48	-1.51	1.42		
20.8	3415.	5000.	-6.52	-7.45	-5.21	-2.28		
26.1	4415.	6000.	-14.04	-7.52	-4.12	-1.20		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3970

DATE 02/10/77 TIME 13:54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.6	0.0	2.6	270.
0.5	76.	1661.	2.2	0.2	2.2	265.
1.0	226.	1811.	3.2	-0.7	3.3	282.
1.5	354.	1939.	2.5	-3.1	4.0	321.
2.0	439.	2024.	1.5	-2.7	3.1	331.
2.5	515.	2100.	-0.5	-1.7	1.8	17.
3.0	592.	2177.	-1.5	-1.5	2.1	45.
3.5	668.	2253.	-1.1	-1.5	1.9	37.
4.0	744.	2329.	-0.4	-1.2	1.3	19.
4.5	820.	2405.	-0.0	-1.2	1.2	1.
5.0	896.	2481.	0.9	-2.5	2.7	340.
5.5	973.	2558.	0.9	-4.0	4.1	347.
6.0	1049.	2634.	-0.5	-4.1	4.1	6.
6.5	1125.	2710.	-2.8	-4.3	5.1	33.
7.0	1201.	2786.	-3.2	-4.9	5.9	33.
7.5	1277.	2862.	-3.1	-4.4	5.4	35.
8.0	1354.	2939.	-3.0	-3.1	4.4	44.
8.5	1437.	3022.	-3.3	-3.5	4.8	44.
9.0	1513.	3098.	-2.6	-3.5	4.3	36.
9.5	1589.	3174.	-2.3	-3.9	4.5	31.
10.0	1665.	3250.	-1.4	-4.7	4.9	17.
10.5	1742.	3327.	-0.6	-6.0	6.0	6.
11.0	1818.	3403.	0.8	-6.5	6.6	353.
11.5	1894.	3479.	1.0	-6.2	6.2	351.
12.0	1970.	3555.	1.1	-6.2	6.3	350.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3960

DATE 02/12/77 TIME 07:19MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-7.12		0.0		3.1	135.
1.0	150	1735	-3.80	3.32	4.78	7.71	3.8	150.
2.0	300	1885	-0.53	3.27	4.55	7.48	2.4	176.
2.3	* 342	1927	-0.13		2.84	5.77		
2.7	415.	2000.	-0.13	0.40	0.0	2.93	3.6	183.
3.3	500	2085	-0.13	0.0	0.0	2.93	3.8	184.
6.0	915.	2500.	-0.13	0.0	-0.38	2.55	3.0	192.
9.3	1415.	3000.	-1.38	-1.25	0.0	2.93	5.4	253.
15.7	2415.	4000.	-3.99	-2.61	-3.63	-0.70		
21.9	3415.	5000.	-8.30	-4.31	0.58	3.51		
28.3	4415.	6000.	-14.83	-6.54	-2.55	0.37		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3960

DATE 02/12/77 TIME 07:19MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.2	2.2	3.1	135.
0.5	76.	1661.	-2.9	4.2	5.1	146.
1.0	152.	1737.	-1.9	3.2	3.7	150.
1.5	229.	1814.	-1.5	2.0	2.5	143.
2.0	305.	1890.	-0.1	2.4	2.4	179.
2.5	381.	1966.	-0.1	3.3	3.3	179.
3.0	457.	2042.	0.5	3.9	4.0	188.
3.5	533.	2118.	0.0	3.7	3.7	180.
4.0	610.	2195.	-1.2	2.1	2.4	149.
4.5	686.	2271.	0.2	2.3	2.3	184.
5.0	762.	2347.	1.3	3.7	3.9	200.
5.5	838.	2423.	0.9	3.7	3.8	194.
6.0	914.	2499.	0.6	3.0	3.1	191.
6.5	991.	2576.	1.8	2.2	2.8	220.
7.0	1067.	2652.	2.9	2.2	3.6	232.
7.5	1143.	2728.	3.8	2.1	4.4	241.
8.0	1219.	2804.	3.7	3.5	5.1	227.
8.5	1295.	2880.	4.1	2.4	4.7	239.
9.0	1372.	2957.	4.8	1.6	5.0	252.
9.5	1448.	3033.	5.5	1.6	5.7	254.
10.0	1524.	3109.	7.5	0.7	7.5	265.
10.5	1600.	3185.	8.7	-0.2	8.7	272.
11.0	1676.	3261.	9.5	-1.1	9.5	277.
11.5	1753.	3338.	10.3	-2.8	10.6	286.
12.0	1829.	3414.	11.5	-3.8	12.1	288.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3963

DATE 02/12/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.67		0.0		2.6	315.
1.0	150	1735	7.07	-1.60	-2.59	0.34	1.4	307.
1.8	300	1885	4.75	-2.32	-2.23	0.70	1.6	327.
2.5	415.	2000.	5.39	0.15	0.37	3.30	3.5	339.
3.1	500	2085	5.03	0.14	-1.67	1.26	3.1	314.
5.8	915.	?2500.	3.79	-1.24	-0.75	2.18	6.4	255.
9.1	1415.	?3000.	2.55	-1.24	-0.75	2.18	4.9	277.
14.9	2415.	4000.	-3.31	-5.87	0.0	2.93		
21.4	3415.	5000.	-6.72	-3.41	-5.01	-2.08		
26.9	4415.	6000.	-13.74	-7.02	-7.05	-4.12		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3963

DATE 02/12/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.8	-1.8	2.6	315.
0.5	76.	1661.	2.7	-0.2	2.7	274.
1.0	154.	1739.	1.0	-0.8	1.3	309.
1.5	234.	1819.	0.3	-0.8	0.9	340.
2.0	331.	1916.	1.2	-1.5	1.9	320.
2.5	408.	1993.	1.1	-3.4	3.5	341.
3.0	484.	2069.	2.2	-2.5	3.4	319.
3.5	560.	2145.	2.1	-1.0	2.3	297.
4.0	636.	2221.	3.1	0.4	3.1	262.
4.5	712.	2297.	3.5	1.3	3.8	249.
5.0	789.	2374.	4.1	2.0	4.6	244.
5.5	865.	2450.	4.9	2.0	5.3	248.
6.0	941.	2526.	6.8	1.3	6.9	259.
6.5	1017.	2602.	9.8	-0.5	9.8	273.
7.0	1093.	2678.	8.8	-0.3	8.8	272.
7.5	1170.	2755.	7.6	1.3	7.7	260.
8.0	1246.	2831.	6.9	2.0	7.2	254.
8.5	1322.	2907.	5.7	1.6	5.9	255.
9.0	1398.	2983.	5.0	-0.1	5.0	271.
9.5	1474.	3059.	3.9	-2.1	4.4	298.
10.0	1551.	3136.	5.5	-1.4	5.7	285.
10.5	1627.	3212.	7.1	-3.0	7.7	293.
11.0	1703.	3288.	8.2	-4.1	9.1	296.
11.5	1779.	3364.	8.7	-4.3	9.7	297.
12.0	1855.	3440.	8.6	-5.3	10.1	302.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3966

DATE 02/14/77 TIME 07:12MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		M				M	M
1.0	150	1735					3.1	99.
2.0	300	1885					3.9	73.
2.7	415.	2000.					6.2	70.
3.3	500	2085					7.5	66.
6.0	915.	2500.					4.3	15.
9.3	1415.	3000.					5.8	332.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3966

DATE 02/14/77 TIME 07:12MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
			THE WIND DATA ARE MISSING			
0.5	76.	1661.	-1.4	3.2	3.5	157.
1.0	152.	1737.	-3.0	0.4	3.1	97.
1.5	229.	1814.	-3.6	-0.7	3.7	79.
2.0	305.	1890.	-3.8	-1.2	3.9	72.
2.5	381.	1966.	-5.2	-1.9	5.5	70.
3.0	457.	2042.	-6.5	-2.5	7.0	69.
3.5	533.	2118.	-7.1	-3.5	7.9	64.
4.0	610.	2195.	-6.0	-4.9	7.8	51.
4.5	686.	2271.	-5.2	-5.9	7.8	41.
5.0	762.	2347.	-2.4	-4.9	5.4	26.
5.5	838.	2423.	-2.0	-4.8	5.2	22.
6.0	914.	2499.	-1.1	-4.2	4.3	15.
6.5	991.	2576.	-0.0	-5.1	5.1	0.
7.0	1067.	2652.	0.5	-5.8	5.8	355.
7.5	1143.	2728.	2.2	-4.5	5.0	334.
8.0	1219.	2804.	-2.9	-3.5	4.6	40.
8.5	1295.	2880.	3.5	-3.5	5.0	315.
9.0	1372.	2957.	2.6	-4.9	5.5	332.
9.5	1448.	3033.	2.8	-5.3	6.0	332.
10.0	1524.	3109.	4.3	-4.7	6.4	317.
10.5	1600.	3185.	6.1	-2.9	6.7	296.
11.0	1676.	3261.	7.9	-1.9	8.1	283.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3982

DATE 02/14/77 TIME 14:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.86		0.0		2.6	270.
1.0	150	1735	7.56	-1.30	-1.66	1.27	2.2	258.
2.0	300	1885	6.71	-0.85	-1.85	1.08	1.1	204.
2.7	415.	2000.	5.77	-0.66	-1.48	1.45	1.4	220.
3.3	500	2085	5.58	-0.47	-0.74	2.19	1.4	249.
6.0	915.	2500.	3.50	-1.88	-1.68	1.25	3.1	281.
9.2	1415.	3000.	-0.13	-3.34	-2.08	0.85	2.9	329.
15.7	2415.	4000.	-0.41	-0.77	-1.89	1.03		
21.3	3415.	5000.	-8.39	-7.97	-0.58	2.35		
27.6	4415.	6000.	-15.14	-6.75	-1.38	1.55		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 3982

DATE 02/14/77 TIME 14:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.6	0.0	2.6	270.
0.5	76.	1661.	3.2	-0.2	3.2	274.
1.0	152.	1737.	2.1	0.5	2.2	257.
1.5	229.	1814.	0.5	0.1	0.5	257.
2.0	305.	1890.	0.4	1.1	1.1	200.
2.5	381.	1966.	0.0	1.9	1.9	180.
3.0	457.	2042.	0.9	-0.0	0.9	270.
3.5	533.	2118.	1.5	1.1	1.9	232.
4.0	610.	2195.	2.4	-1.4	2.8	299.
4.5	686.	2271.	1.9	-1.3	2.3	303.
5.0	762.	2347.	2.1	-0.7	2.2	288.
5.5	838.	2423.	2.6	-1.2	2.9	295.
6.0	914.	2499.	3.0	-0.6	3.1	281.
6.5	991.	2576.	5.0	-1.8	5.3	289.
7.0	1067.	2652.	5.5	-2.0	5.8	290.
7.5	1143.	2728.	4.1	-0.0	4.1	270.
8.0	1219.	2804.	1.0	-1.1	1.5	316.
8.5	1295.	2880.	1.3	-1.7	2.2	321.
9.0	1381.	2966.	1.4	-1.7	2.2	322.
9.5	1472.	3057.	1.2	-3.7	3.9	342.
10.0	1548.	3133.	-0.6	-3.4	3.5	9.
10.5	1625.	3210.	1.9	-2.1	2.8	317.
11.0	1701.	3286.	2.2	-3.6	4.2	328.
11.5	1777.	3362.	2.1	-7.5	7.8	344.
12.0	1853.	3438.	6.4	-9.7	11.7	327.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4048

DATE 02/16/77 TIME 07:06MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-7.70		0.0		2.6	135.
1.0	150	1735	-2.54	5.16	5.71	8.64	1.6	132.
2.0	300	1885	-0.03	2.51	2.46	5.39	1.9	173.
2.7	415.	2000.	0.64	0.58	0.57	3.49	1.5	192.
3.3	500	2085	0.64	0.10	0.19	3.12	1.4	186.
6.0	915.	?2500.	0.17	-0.48	-0.76	2.17	1.0	128.
9.3	1415.	?3000.	-1.09	-1.25	-0.76	2.17	5.8	26.
15.8	2415.	4000.	-6.03	-4.95	-1.15	1.77		
22.3	3415.	5000.	-8.89	-2.85	-1.36	1.57		
28.8	4415.	6000.	-14.64	-5.75	-0.59	2.34		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4048

DATE 02/16/77 TIME 07:06MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.8	1.8	2.6	135.
0.5	76.	1661.	-1.9	2.6	3.2	143.
1.0	152.	1737.	-1.2	1.0	1.6	132.
1.5	229.	1814.	-1.2	0.3	1.2	103.
2.0	305.	1890.	-0.1	2.0	2.0	178.
2.5	381.	1966.	0.4	1.4	1.5	195.
3.0	457.	2042.	0.2	1.4	1.4	188.
3.5	533.	2118.	0.1	1.5	1.5	184.
4.0	610.	2195.	-0.1	1.0	1.0	174.
4.5	686.	2271.	0.1	0.5	0.5	188.
5.0	762.	2347.	0.7	0.6	1.0	229.
5.5	838.	2423.	0.0	0.1	0.1	184.
6.0	914.	2499.	-0.8	0.6	1.0	128.
6.5	991.	2576.	-1.7	0.3	1.7	101.
7.0	1067.	2652.	-2.1	-0.1	2.1	88.
7.5	1143.	2728.	-3.4	-1.6	3.8	64.
8.0	1219.	2804.	-3.1	-3.1	4.4	45.
8.5	1295.	2880.	-3.7	-5.2	6.3	35.
9.0	1372.	2957.	-2.8	-5.7	6.3	26.
9.5	1448.	3033.	-2.4	-4.9	5.5	26.
10.0	1524.	3109.	-2.0	-4.3	4.8	25.
10.5	1600.	3185.	-1.0	-4.7	4.8	11.
11.0	1676.	3261.	-0.5	-5.4	5.4	6.
11.5	1753.	3338.	-0.2	-4.7	4.7	3.
12.0	1829.	3414.	-0.2	-3.5	3.5	4.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4050

DATE 02/16/77 TIME 13:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.10		0.0		2.1	225.
1.0	150	1735	13.83	0.73	0.54	3.47	2.3	211.
2.0	300	1885	13.47	-0.36	-0.72	2.21	2.9	217.
2.7	415.	2000.	13.10	-0.64	-0.36	2.57	6.3	221.
3.3	500	2085	13.10	0.27	-1.08	1.85	7.2	219.
5.8	915.	2500.	10.25	-2.85	-0.91	2.02	8.1	231.
9.1	1415.	?3000.	7.65	-2.60	-2.21	0.72	11.5	257.
15.5	2415.	4000.	3.22	-4.43	-1.31	1.62		
22.0	3415.	5000.	-0.22	-3.44	-1.32	1.60		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4050

DATE 02/16/77 TIME 13:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.5	1.5	2.1	225.
0.5	76.	1661.	2.3	1.8	3.0	232.
1.0	152.	1737.	1.1	2.0	2.3	210.
1.5	229.	1814.	1.0	1.7	2.0	210.
2.0	305.	1890.	1.8	2.3	2.9	217.
2.5	381.	1966.	3.6	4.1	5.5	221.
3.0	457.	2042.	4.8	5.4	7.3	221.
3.5	533.	2118.	4.4	5.7	7.2	218.
4.0	610.	2195.	3.6	5.3	6.4	215.
4.5	686.	2271.	3.6	5.2	6.3	215.
5.0	780.	2365.	5.1	6.4	8.2	219.
5.5	866.	2451.	6.1	5.6	8.2	228.
6.0	943.	2528.	6.5	4.8	8.0	234.
6.5	1019.	2604.	6.5	4.6	7.9	234.
7.0	1095.	2680.	8.0	4.8	9.4	239.
7.5	1171.	2756.	8.9	4.9	10.2	241.
8.0	1247.	2832.	10.4	5.2	11.6	244.
8.5	1324.	2909.	11.3	4.7	12.3	247.
9.0	1400.	2985.	11.4	2.9	11.7	256.
9.5	1476.	3061.	10.4	1.2	10.5	264.
10.0	1552.	3137.	9.3	0.2	9.3	269.
10.5	1628.	3213.	8.3	0.1	8.3	269.
11.0	1705.	3290.	8.4	-0.3	8.4	272.
11.5	1781.	3366.	7.7	-1.2	7.8	279.
12.0	1885.	3470.	9.8	1.8	10.0	260.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4054

DATE 02/18/77 TIME 07:14MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-3.70		0.0		3.6	135.
1.0	150	1735	0.71	4.41	6.79	9.72	5.6	140.
1.8	* 266	1851	2.74		1.69	4.62		
2.0	300	1885	2.74	2.03	0.75	3.68	4.2	169.
2.7	415.	2000.	2.74	0.0	0.0	2.93	4.3	186.
3.3	500	2085	2.74	0.0	-0.37	2.55	3.9	200.
6.0	915.	2500.	0.45	-2.00	-0.75	2.17	8.0	265.
9.3	1415.	3000.	-0.90	-1.63	-0.95	1.98	5.1	277.
14.7	2415.	4000.	-8.69	-7.79	-6.19	-3.26		
20.1	3415.	5000.	-17.14	-8.45	-4.35	-1.42		
25.3	4415.	6000.	-24.63	-7.49	-1.20	1.73		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4054

DATE 02/18/77 TIME 07:14MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.5	2.5	3.6	135.
0.5	76.	1661.	-2.7	3.9	4.7	146.
1.0	152.	1737.	-3.6	4.3	5.6	140.
1.5	229.	1814.	-3.0	5.4	6.2	151.
2.0	305.	1890.	-0.7	4.0	4.1	170.
2.5	381.	1966.	0.2	4.2	4.2	183.
3.0	457.	2042.	0.8	4.2	4.3	190.
3.5	533.	2118.	1.6	3.2	3.5	207.
4.0	610.	2195.	2.4	2.6	3.6	223.
4.5	686.	2271.	3.4	2.2	4.1	237.
5.0	762.	2347.	4.7	2.4	5.3	243.
5.5	838.	2423.	6.6	1.8	6.8	254.
6.0	914.	2499.	7.9	0.7	8.0	265.
6.5	991.	2576.	9.6	-1.2	9.6	277.
7.0	1067.	2652.	7.7	-0.5	7.7	273.
7.5	1143.	2728.	7.1	-1.6	7.3	282.
8.0	1219.	2804.	7.0	-1.6	7.2	283.
8.5	1295.	2880.	6.2	-0.9	6.3	278.
9.0	1372.	2957.	5.4	-0.1	5.4	272.
9.5	1448.	3033.	4.8	-1.0	4.9	281.
10.0	1524.	3109.	4.3	-0.8	4.4	281.
10.5	1600.	3185.	3.3	-0.2	3.3	273.
11.0	1676.	3261.	2.0	-1.4	2.5	305.
11.5	1763.	3348.	2.2	-2.0	3.0	312.
12.0	1842.	3427.	1.8	-3.4	3.8	332.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4049

DATE 02/18/77 TIME 13:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		14.10		0.0		1.0	270.
0.8	150	1735	11.30	-2.81	-4.35	-1.42	0.4	144.
1.4	300	1885	10.26	-1.04	-2.73	0.20	0.6	286.
2.1	415.	2000.	8.77	-0.65	-4.76	-1.84	0.7	232.
2.6	500	2085	8.08	-1.54	-3.31	-0.38	1.8	235.
5.1	915.	2500.	5.68	-2.50	0.19	3.11	5.0	254.
8.3	1415.	3000.	4.64	-0.93	-1.30	1.63	8.6	248.
14.5	2415.	4000.	-2.15	-6.79	-4.19	-1.26		
20.3	3415.	5000.	-9.77	-7.62	-1.94	0.99		
25.9	4415.	6000.	-15.64	-5.87	0.20	3.13		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4049

DATE 02/18/77 TIME 13:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.0	0.0	1.0	270.
0.5	76.	1661.	0.5	-0.0	0.5	274.
1.0	221.	1806.	-0.1	-0.3	0.3	19.
1.5	314.	1899.	0.3	-0.5	0.6	333.
2.0	390.	1975.	0.4	0.3	0.5	232.
2.5	479.	2064.	1.0	0.8	1.3	230.
3.0	598.	2183.	4.1	0.6	4.1	262.
3.5	678.	2263.	5.5	1.4	5.7	256.
4.0	754.	2339.	5.4	0.6	5.4	263.
4.5	831.	2416.	5.1	0.1	5.1	269.
5.0	907.	2492.	4.7	1.4	4.9	254.
5.5	983.	2568.	5.4	1.9	5.7	251.
6.0	1059.	2644.	4.4	2.0	4.8	246.
6.5	1135.	2720.	5.7	3.0	6.4	242.
7.0	1212.	2797.	6.7	3.0	7.3	246.
7.5	1288.	2873.	7.2	2.6	7.7	250.
8.0	1364.	2949.	8.2	3.2	8.8	249.
8.5	1440.	3025.	7.9	3.3	8.6	247.
9.0	1516.	3101.	8.9	3.3	9.5	249.
9.5	1593.	3178.	9.6	3.8	10.3	248.
10.0	1669.	3254.	10.3	4.2	11.1	248.
10.5	1766.	3351.	12.0	4.4	12.8	250.
11.0	1864.	3449.	8.5	2.5	8.9	254.
11.5	1940.	3525.	4.7	0.6	4.7	262.
12.0	2017.	3602.	3.6	-0.1	3.6	271.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4051

DATE 02/20/77 TIME 06:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN		HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
		SFC		-8.04		0.0		2.1	135.
1.0		150	1735	-4.44	3.59	6.10	9.02	2.3	111.
1.8	*	266	1851	-2.22		2.08	5.01		
2.0		300	1885	-2.22	2.22	1.89	4.82	2.3	189.
2.7		415.	?2000.	-1.94	0.29	1.89	4.82	1.7	191.
3.3	?	500	2085	-1.18	0.75	1.13	4.06	1.8	181.
6.0		915.	?2500.	-1.17	0.02	-0.19	2.74	4.7	208.
9.3		1415.	3000.	-1.26	-0.10	-0.57	2.36	5.6	241.
15.8		2415.	4000.	-5.89	-4.63	-2.10	0.83		
22.3		3415.	5000.	-11.67	-5.78	-0.78	2.15		
28.7		4415.	6000.	-17.34	-5.67	-2.76	0.17		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4051

DATE 02/20/77 TIME 06:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.5	1.5	2.1	135.
0.5	76.	1661.	-1.2	2.0	2.3	147.
1.0	152.	1737.	-2.2	0.8	2.3	109.
1.5	229.	1814.	-0.5	0.3	0.5	119.
2.0	305.	1890.	0.6	2.4	2.4	194.
2.5	381.	1966.	0.4	1.7	1.8	193.
3.0	457.	2042.	0.2	1.6	1.6	189.
3.5	533.	2118.	-0.2	2.0	2.0	175.
4.0	610.	2195.	0.5	2.3	2.4	193.
4.5	686.	2271.	1.1	2.5	2.7	203.
5.0	762.	2347.	1.6	2.6	3.1	212.
5.5	838.	2423.	1.6	3.5	3.9	205.
6.0	914.	2499.	2.2	4.1	4.7	208.
6.5	991.	2576.	3.3	4.0	5.2	220.
7.0	1067.	2652.	3.9	3.4	5.2	229.
7.5	1143.	2728.	4.5	2.6	5.2	240.
8.0	1219.	2804.	4.6	1.9	5.0	247.
8.5	1295.	2880.	3.5	3.2	4.7	228.
9.0	1372.	2957.	4.3	3.2	5.3	234.
9.5	1448.	3033.	5.2	2.4	5.7	246.
10.0	1524.	3109.	6.2	2.4	6.6	249.
10.5	1600.	3185.	7.3	2.4	7.6	252.
11.0	1676.	3261.	6.9	0.9	6.9	263.
11.5	1753.	3338.	6.8	-0.2	6.8	272.
12.0	1829.	3414.	6.8	-0.4	6.8	274.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4053

DATE 02/20/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.01		0.0		1.8	270.
1.0	150	1735	11.64	-1.37	-2.70	0.23	0.8	265.
2.0	300	1885	12.91	1.26	0.90	3.83	0.7	262.
2.7	415.	2000.	12.92	0.10	-1.80	1.12	0.7	238.
3.3	500	2085	12.11	-0.90	-3.43	-0.51	0.7	216.
5.9	915.	2500.	10.71	-1.37	-3.63	-0.70	6.0	240.
9.1	1415.	3000.	8.39	-2.34	0.18	3.11	7.9	262.
15.0	2415.	4000.	2.84	-5.55	-1.12	1.81		
21.5	3415.	5000.	-2.04	-4.89	-1.90	1.03		
28.0	4415.	6000.	-10.36	-8.32	-3.89	-0.96		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4053

DATE 02/20/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.8	0.0	1.8	270.
0.5	76.	1661.	1.1	0.4	1.2	249.
1.0	152.	1737.	0.8	0.1	0.8	266.
1.5	229.	1814.	0.5	-0.7	0.8	324.
2.0	305.	1890.	0.6	0.1	0.7	258.
2.5	381.	1966.	0.6	0.2	0.6	252.
3.0	457.	2042.	0.5	0.6	0.8	221.
3.5	533.	2118.	0.4	0.6	0.7	212.
4.0	628.	2213.	1.2	0.8	1.5	236.
4.5	704.	2289.	2.2	1.9	3.0	229.
5.0	780.	2365.	4.4	2.4	5.0	241.
5.5	856.	2441.	4.9	3.0	5.7	239.
6.0	936.	2521.	5.3	3.0	6.1	241.
6.5	1021.	2606.	5.6	2.6	6.2	245.
7.0	1097.	2682.	6.0	2.2	6.3	250.
7.5	1174.	2759.	6.2	1.6	6.4	256.
8.0	1250.	2835.	7.0	1.1	7.1	261.
8.5	1326.	2911.	7.8	0.9	7.9	263.
9.0	1402.	2987.	7.7	1.2	7.8	261.
9.5	1478.	3063.	8.4	0.9	8.4	264.
10.0	1555.	3140.	9.1	0.5	9.1	267.
10.5	1631.	3216.	9.2	0.7	9.3	266.
11.0	1727.	3312.	10.8	1.4	10.9	263.
11.5	1849.	3434.	11.8	2.2	12.0	260.
12.0	1930.	3515.	8.5	1.6	8.7	259.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4055

DATE 02/22/77 TIME 07:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		0.83		0.0		7.7	270.
0.8	150	1735	-1.28	-2.11	-3.42	-0.49	10.8	258.
1.5	300	1885	-3.52	-2.24	-4.21	-1.28	10.0	252.
2.1	415.	2000.	-4.97	-1.01	-4.22	-1.29	10.4	256.
2.4	500	2085	-4.95	-0.43	-4.22	-1.29	11.3	258.
4.7	915.	2500.	-9.28	-4.13	0.78	3.70	11.8	283.
7.6	1415.	3000.	-13.01	-3.93	-5.87	-2.94	M	M
13.3	2415.	4000.	-21.89	-8.88	-2.39	0.54		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4055

DATE 02/22/77 TIME 07:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	7.7	0.0	7.7	270.
0.5	76.	1661.	8.8	2.2	9.1	256.
1.0	191.	1776.	11.5	2.3	11.8	259.
1.5	293.	1878.	9.4	3.2	10.0	251.
2.0	399.	1984.	9.9	2.5	10.2	256.
2.5	514.	2099.	11.2	2.4	11.4	258.
3.0	606.	2191.	8.2	1.7	8.4	258.
3.5	688.	2273.	9.5	0.6	9.6	266.
4.0	791.	2376.	10.0	-1.7	10.2	280.
4.5	887.	2472.	11.7	-2.4	11.9	282.
5.0	963.	2548.	11.2	-3.1	11.6	286.
5.5	1040.	2625.	11.0	-4.1	11.8	290.
6.0	1116.	2701.	9.8	-4.2	10.7	293.
6.5	1198.	2783.	7.3	-3.9	8.3	298.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4041

DATE 02/22/77 TIME 13:53MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		2.74		0.0		6.7	315.
0.9	150	1735	0.87	-1.87	-2.64	0.29	2.7	334.
1.9	300	1885	-0.12	-0.99	-0.94	1.98	4.5	316.
2.6	415.	2000.	-2.05	-0.92	-5.70	-2.77	6.1	299.
3.1	500	2085	-1.88	-0.84	-0.95	1.98	7.5	293.
5.4	915.	2500.	-5.06	-3.18	-1.73	1.20	9.2	290.
8.2	1415.	3000.	-8.39	-3.33	0.19	3.12	M	M
13.7	2415.	4000.	-17.74	-9.35	-4.94	-2.01		
19.0	3415.	5000.	-27.48	-9.74	-7.45	-4.52		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4041

DATE 02/22/77 TIME 13:53MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	4.7	-4.7	6.7	315.
0.5	76.	1661.	0.9	-2.0	2.2	336.
1.0	162.	1747.	1.3	-2.5	2.8	333.
1.5	238.	1823.	1.8	-2.9	3.4	328.
2.0	314.	1899.	3.5	-3.2	4.7	313.
2.5	391.	1976.	4.9	-3.0	5.8	301.
3.0	482.	2067.	6.6	-2.8	7.1	293.
3.5	593.	2178.	8.3	-3.8	9.1	295.
4.0	669.	2254.	8.3	-3.7	9.1	294.
4.5	751.	2336.	9.3	-4.2	10.2	295.
5.0	853.	2438.	10.2	-3.5	10.8	289.
5.5	929.	2514.	8.3	-3.0	8.8	290.
6.0	1005.	2590.	8.0	-2.6	8.4	288.
6.5	1113.	2698.	11.1	-4.2	11.9	291.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4042

DATE 02/24/77 TIME 06:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-1.13		0.0		6.2	270.
1.0	150	1735	-1.98	-0.86	-4.37	-1.44	5.1	249.
1.6	300	1885	-4.12	-2.14	-4.78	-1.85	8.4	254.
2.0	415.	2000.	-4.89	-0.77	-4.78	-1.85	10.2	246.
2.4	500	2085	-5.91	-1.02	-3.84	-0.91	12.7	245.
4.1	915.	2500.	-10.77	-4.52	-2.72	0.21	16.0	254.
7.0	1415.	3000.	-14.14	-3.51	-2.55	0.38	15.8	272.
13.3	2415.	4000.	-22.89	-8.95	-2.00	0.93		
19.1	3415.	5000.	-30.64	-7.75	-0.61	2.32		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4042

DATE 02/24/77 TIME 06:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	6.2	0.0	6.2	270.
0.5	76.	1661.	5.3	2.2	5.7	247.
1.0	152.	1737.	4.7	1.8	5.1	249.
1.5	275.	1860.	7.8	1.9	8.0	256.
2.0	418.	2003.	9.3	4.2	10.3	246.
2.5	532.	2117.	12.3	6.0	13.7	244.
3.0	637.	2222.	10.4	4.4	11.3	247.
3.5	752.	2337.	11.8	3.0	12.2	256.
4.0	899.	2484.	14.9	4.4	15.5	253.
4.5	1017.	2602.	18.6	3.6	18.9	259.
5.0	1094.	2679.	16.9	2.6	17.1	261.
5.5	1170.	2755.	16.6	1.4	16.6	265.
6.0	1246.	2831.	15.7	0.8	15.7	267.
6.5	1322.	2907.	15.1	-0.6	15.2	272.
7.0	1407.	2992.	16.0	-0.6	16.0	272.
7.5	1484.	3069.	14.3	-1.2	14.3	275.
8.0	1562.	3147.	15.0	-1.0	15.0	274.
8.5	1640.	3225.	15.6	-0.6	15.6	272.
9.0	1718.	3303.	14.4	-0.8	14.4	273.
9.5	1796.	3381.	14.8	-0.7	14.8	273.
10.0	1874.	3459.	15.2	0.0	15.2	270.
10.5	1960.	3545.	16.7	0.5	16.7	268.
11.0	2041.	3626.	16.5	0.8	16.5	267.
11.5	2119.	3704.	16.6	1.2	16.6	266.
12.0	2200.	3785.	14.8	1.0	14.8	266.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4045

DATE 02/24/77 TIME 13:53MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		7.46		0.0		8.8	270.
0.9	150	1735	5.63	-1.83	-3.52	-0.59	7.9	281.
1.8	300	1885	4.36	-1.27	-1.68	1.25	9.6	285.
2.6	415.	2000.	2.84	-0.75	-3.93	-1.00	11.0	283.
3.0	500	2085	2.40	-1.22	-3.19	-0.26	10.1	284.
5.5	915.	2500.	-0.51	-2.52	-3.60	-0.67	8.6	270.
8.2	1415.	3000.	-4.58	-3.87	-4.80	-1.87	9.4	256.
13.6	2415.	4000.	-14.73	-10.74	-4.52	-1.59		
19.8	*3390	4975	-19.76		1.79	4.71		
19.9	3415.	5000.	-19.66	-4.93	4.76	7.68		
25.3	4415.	6000.	-21.88	-2.22	-2.39	0.54		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4045

DATE 02/24/77 TIME 13:53MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	8.8	0.0	8.8	270.
0.5	76.	1661.	4.7	-1.1	4.9	283.
1.0	168.	1753.	8.5	-1.6	8.6	280.
1.5	253.	1838.	9.4	-2.2	9.6	283.
2.0	329.	1914.	9.3	-2.7	9.6	286.
2.5	405.	1990.	10.9	-2.4	11.1	282.
3.0	491.	2076.	10.0	-2.6	10.3	285.
3.5	590.	2175.	8.3	-0.7	8.3	275.
4.0	669.	2254.	6.6	1.3	6.7	259.
4.5	745.	2330.	5.1	1.6	5.3	253.
5.0	821.	2406.	5.4	1.0	5.5	259.
5.5	910.	2495.	8.5	0.0	8.5	270.
6.0	1016.	2601.	10.7	0.1	10.7	270.
6.5	1107.	2692.	9.0	2.7	9.4	253.
7.0	1198.	2783.	10.2	2.6	10.6	256.
7.5	1290.	2875.	6.2	2.1	6.6	251.
8.0	1379.	2964.	7.8	1.7	7.9	258.
8.5	1459.	3044.	10.6	3.2	11.1	253.
9.0	1593.	3178.	15.5	4.2	16.1	255.
9.5	1720.	3305.	13.4	3.0	13.7	257.
10.0	1816.	3401.	6.3	2.5	6.8	248.
10.5	1907.	3492.	2.6	1.4	3.0	241.
11.0	1996.	3581.	6.2	1.8	6.4	254.
11.5	2078.	3663.	5.5	1.5	5.7	255.
12.0	2156.	3741.	7.2	0.3	7.2	268.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4040

DATE 02/26/77 TIME 07:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-10.56		0.0		5.1	135.
1.0	150	1735	-7.92	2.65	6.39	9.31	6.5	150.
1.8	* 266	1851	-6.33		2.31	5.24		
2.0	300	1885	-6.72	1.20	0.96	3.89	4.4	199.
2.7	415.	2000.	-6.63	0.58	-1.73	1.19	5.5	207.
3.3	500	2085	-6.91	-0.77	-3.09	-0.16	5.6	218.
5.8	915.	2500.	-9.77	-2.86	-1.36	1.57	3.7	224.
9.1	1415.	?3000.	-12.25	-2.48	-0.98	1.95	3.2	235.
14.8	2415.	4000.	-17.85	-5.60	-0.79	2.14		
19.9	3415.	5000.	-26.26	-8.41	-1.61	1.32		
25.6	4415.	6000.	-32.62	-6.36	-2.64	0.29		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4040

DATE 02/26/77 TIME 07:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-3.6	3.6	5.1	135.
0.5	76.	1661.	-2.2	3.8	4.4	149.
1.0	152.	1737.	-3.3	5.7	6.6	150.
1.5	229.	1814.	-3.5	5.9	6.9	150.
2.0	305.	1890.	1.6	4.0	4.3	202.
2.5	381.	1966.	1.8	5.2	5.5	199.
3.0	457.	2042.	3.3	4.3	5.4	217.
3.5	537.	2122.	3.6	4.4	5.7	219.
4.0	625.	2210.	3.1	3.7	4.8	220.
4.5	713.	2298.	3.8	4.3	5.7	221.
5.0	789.	2374.	4.1	3.7	5.5	228.
5.5	865.	2450.	2.9	2.6	3.9	228.
6.0	941.	2526.	2.4	2.7	3.6	222.
6.5	1017.	2602.	3.0	2.5	3.9	230.
7.0	1094.	2679.	3.1	3.1	4.4	225.
7.5	1170.	2755.	3.2	3.2	4.5	225.
8.0	1246.	2831.	3.7	2.6	4.5	235.
8.5	1324.	2909.	3.3	2.2	4.0	237.
9.0	1400.	2985.	2.5	1.7	3.0	236.
9.5	1476.	3061.	2.9	2.4	3.7	230.
10.0	1552.	3137.	2.9	3.0	4.2	224.
10.5	1628.	3213.	1.5	2.3	2.7	214.
11.0	1705.	3290.	0.9	1.0	1.3	224.
11.5	1781.	3366.	1.9	0.2	1.9	264.
12.0	1857.	3442.	2.4	0.1	2.4	268.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4043

DATE 02/26/77 TIME 13:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		4.36		0.0		7.2	315.
0.9	150	1735	2.38	-1.97	-2.25	0.68	7.1	318.
1.8	300	1885	1.51	-0.87	-1.69	1.23	6.5	305.
2.6	415.	2000.	-0.13	-1.22	-2.08	0.85	6.9	303.
3.1	500	2085	-0.22	-0.51	-1.70	1.22	7.6	298.
5.3	915.	2500.	-4.58	-4.32	-3.25	-0.33	9.7	280.
7.5	1415.	3000.	-8.89	-4.06	-1.94	0.99	13.7	274.
13.9	2415.	4000.	-14.84	-6.25	-2.36	0.57		
19.7	3415.	5000.	-17.85	-3.01	-1.19	1.74		
24.1	4415.	6000.	-24.74	-6.89	0.0	2.93		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4043

DATE 02/26/77 TIME 13:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	5.1	-5.1	7.2	315.
0.5	76.	1661.	2.9	-4.1	5.0	325.
1.0	174.	1759.	5.3	-5.6	7.7	316.
1.5	250.	1835.	4.9	-4.0	6.3	310.
2.0	326.	1911.	5.5	-3.6	6.5	303.
2.5	402.	1987.	5.6	-3.8	6.8	304.
3.0	481.	2066.	6.8	-3.7	7.8	299.
3.5	557.	2142.	6.5	-3.0	7.2	295.
4.0	641.	2226.	4.9	-1.6	5.2	288.
4.5	732.	2317.	5.0	-0.7	5.0	278.
5.0	834.	2419.	7.0	-1.1	7.1	279.
5.5	962.	2547.	11.1	-2.1	11.2	281.
6.0	1045.	2630.	10.3	-0.4	10.3	272.
6.5	1152.	2737.	15.9	-0.9	16.0	273.
7.0	1303.	2888.	15.8	-1.1	15.8	274.
7.5	1413.	2998.	13.8	-0.9	13.8	274.
8.0	1489.	3074.	10.2	0.2	10.2	269.
8.5	1566.	3151.	13.3	0.4	13.3	268.
9.0	1650.	3235.	17.5	-0.8	17.6	273.
9.5	1744.	3329.	21.7	-1.6	21.7	274.
10.0	1821.	3406.	19.9	-1.2	19.9	274.
10.5	1897.	3482.	20.5	-1.6	20.6	274.
11.0	1973.	3558.	19.3	-0.9	19.3	273.
11.5	2049.	3634.	20.7	-2.6	20.8	277.
12.0	2125.	3710.	20.3	-2.4	20.5	277.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4044

DATE 02/28/77 TIME 06:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-8.59		0.0		3.1	135.
1.0	150	1735	-4.01	4.58	5.95	8.88	4.6	154.
1.8	* 266	1851	-3.12		0.76	3.69		
2.0	300	1885	-3.31	0.71	0.19	3.12	4.1	175.
2.7	415.	2000.	-3.99	-0.49	-1.91	1.01	29.8	110.
3.3	500	2085	-4.74	-0.94	-2.11	0.82	16.5	233.
6.0	915.	2500.	-7.61	-2.36	-2.70	0.22	4.3	228.
9.2	1415.	3000.	-9.87	-2.97	-0.39	2.54	4.2	263.
15.8	2415.	4000.	-13.64	-3.57	0.78	3.71		
22.3	3415.	5000.	-15.85	-2.20	1.18	4.11		
28.3	4415.	6000.	-24.01	-8.16	-5.01	-2.08		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4044

DATE 02/28/77 TIME 06:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.2	2.2	3.1	135.
0.5	76.	1661.	-1.2	3.0	3.2	158.
1.0	152.	1737.	-2.1	4.2	4.7	154.
1.5	229.	1814.	-1.6	4.9	5.2	162.
2.0	305.	1890.	-0.3	4.0	4.0	176.
2.5	381.	1966.	-13.2	-23.6	27.1	29.
3.0	457.	2042.	16.4	28.9	33.2	210.
3.5	533.	2118.	3.3	1.1	3.5	251.
4.0	610.	2195.	3.2	0.9	3.4	255.
4.5	686.	2271.	2.3	1.5	2.8	238.
5.0	762.	2347.	1.8	2.3	3.0	218.
5.5	838.	2423.	2.5	3.4	4.2	216.
6.0	914.	2499.	3.2	2.9	4.3	228.
6.5	1000.	2585.	3.8	2.4	4.5	237.
7.0	1076.	2661.	4.1	0.5	4.1	263.
7.5	1156.	2741.	5.4	-0.1	5.4	271.
8.0	1232.	2817.	6.2	-1.0	6.3	279.
8.5	1309.	2894.	5.4	-0.7	5.4	278.
9.0	1385.	2970.	4.7	0.3	4.7	266.
9.5	1461.	3046.	3.4	0.7	3.4	258.
10.0	1537.	3122.	3.5	-0.3	3.5	276.
10.5	1613.	3198.	4.1	-1.0	4.2	284.
11.0	1690.	3275.	4.3	-1.8	4.6	292.
11.5	1766.	3351.	4.9	-2.3	5.4	295.
12.0	1842.	3427.	5.3	-2.6	5.9	296.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4044

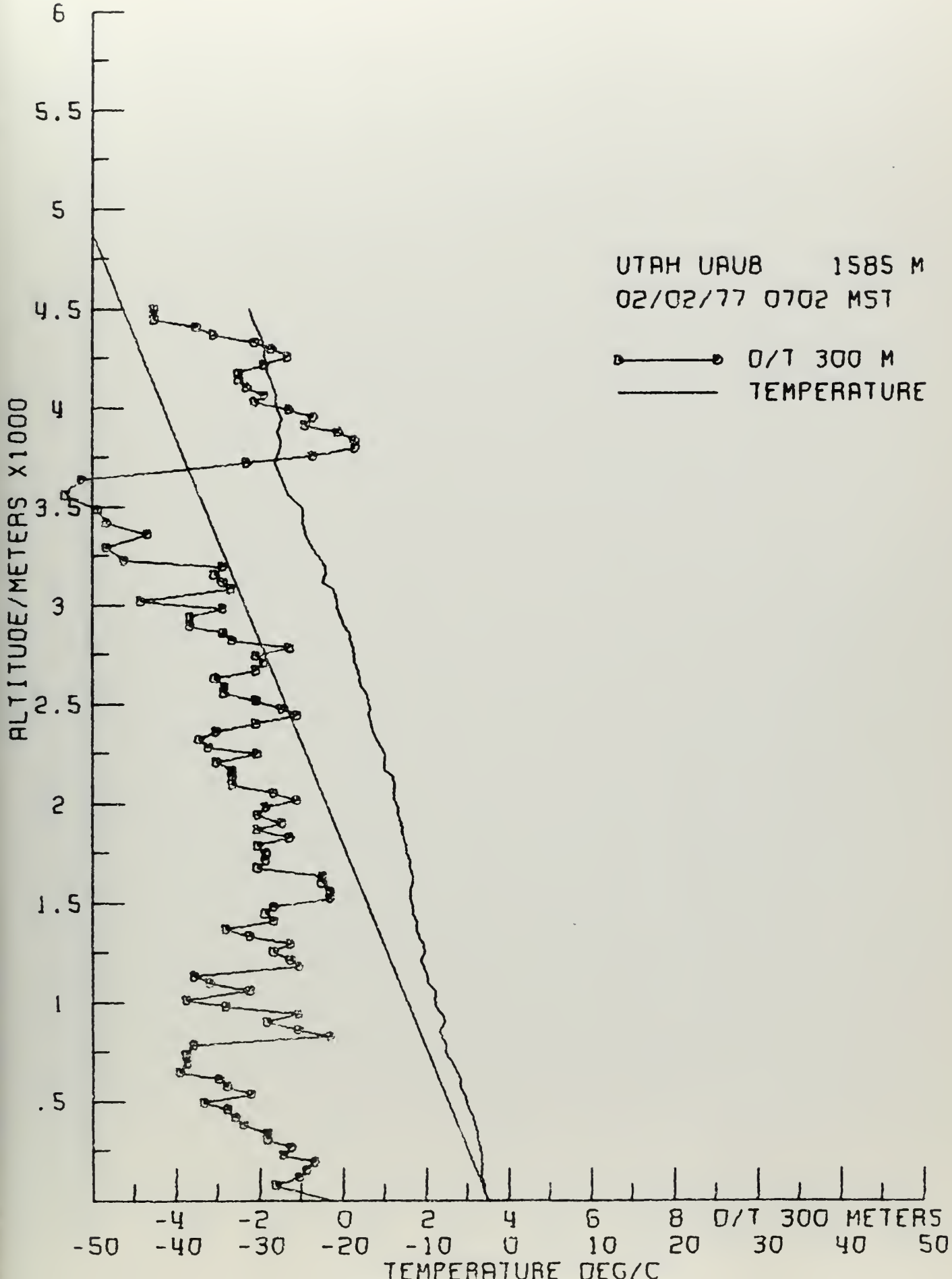
DATE 02/28/77 TIME 06:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

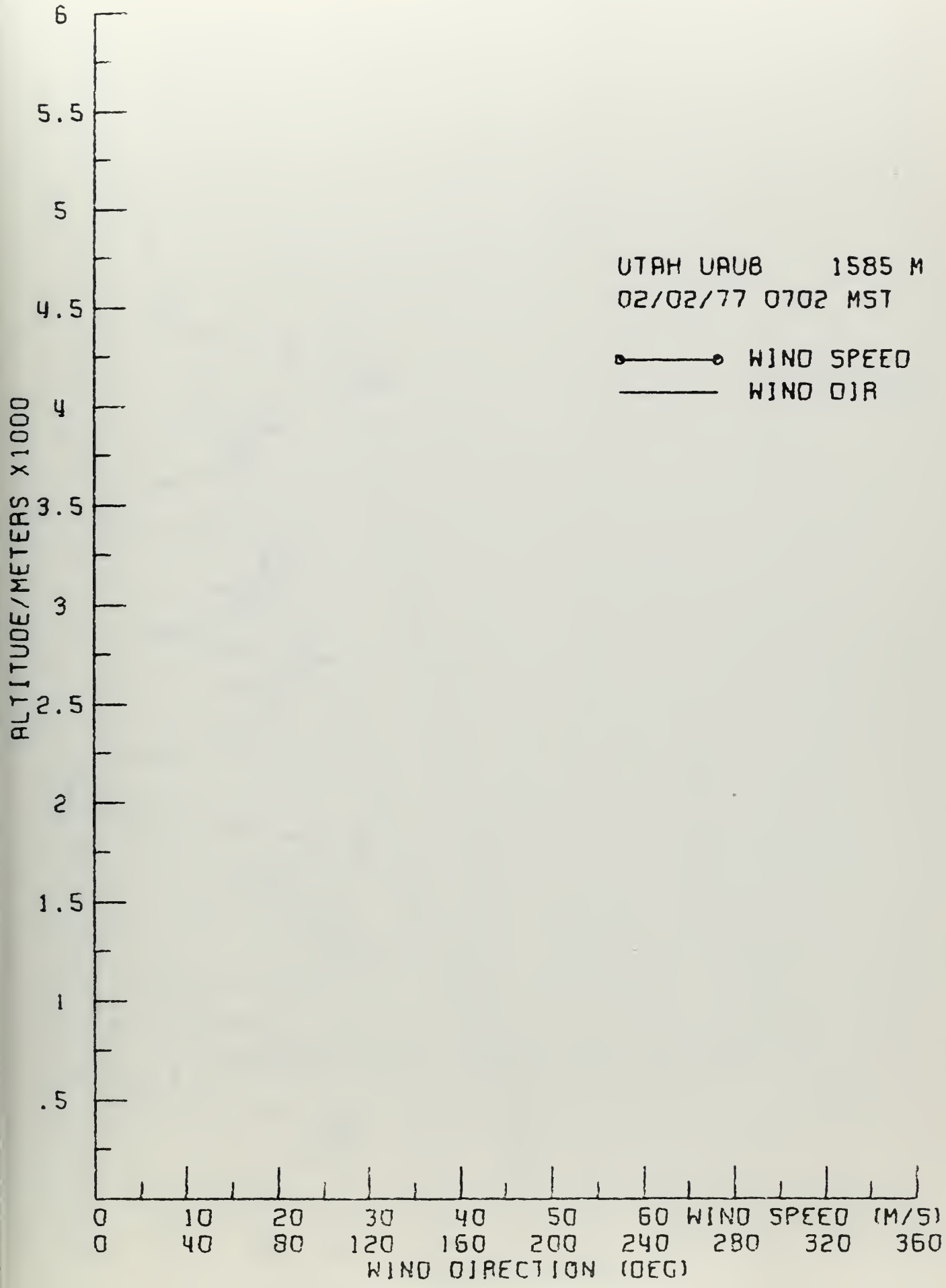
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-8.59		0.0		3.1	135.
1.0	150	1735	-4.01	4.58	5.95	8.88	4.6	154.
1.8	* 266	1851	-3.12		0.76	3.69		
2.0	300	1885	-3.31	0.71	0.19	3.12	4.1	175.
2.7	415.	2000.	-3.99	-0.49	-1.91	1.01	3.2	211.
3.3	500	2085	-4.74	-0.94	-2.11	0.82	3.3	242.
6.0	915.	2500.	-7.61	-2.36	-2.70	0.22	4.3	228.
9.2	1415.	3000.	-9.87	-2.97	-0.39	2.54	4.2	263.
15.8	2415.	4000.	-13.64	-3.57	0.78	3.71		
22.3	3415.	5000.	-15.85	-2.20	1.18	4.11		
28.3	4415.	6000.	-24.01	-8.16	-5.01	-2.08		

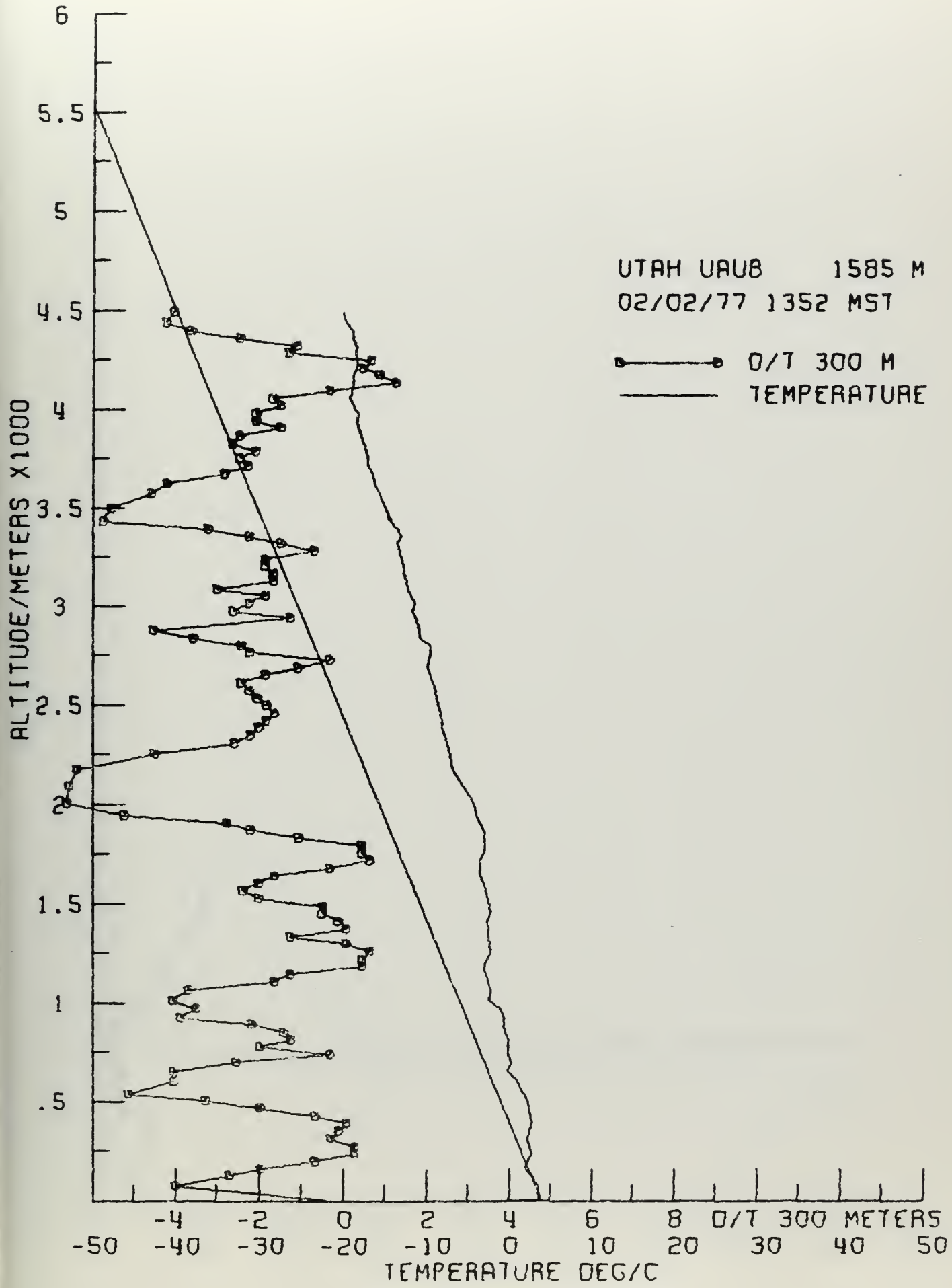
UTAH UAUB ELEV 1585 METERS SOUNDING ID 4044

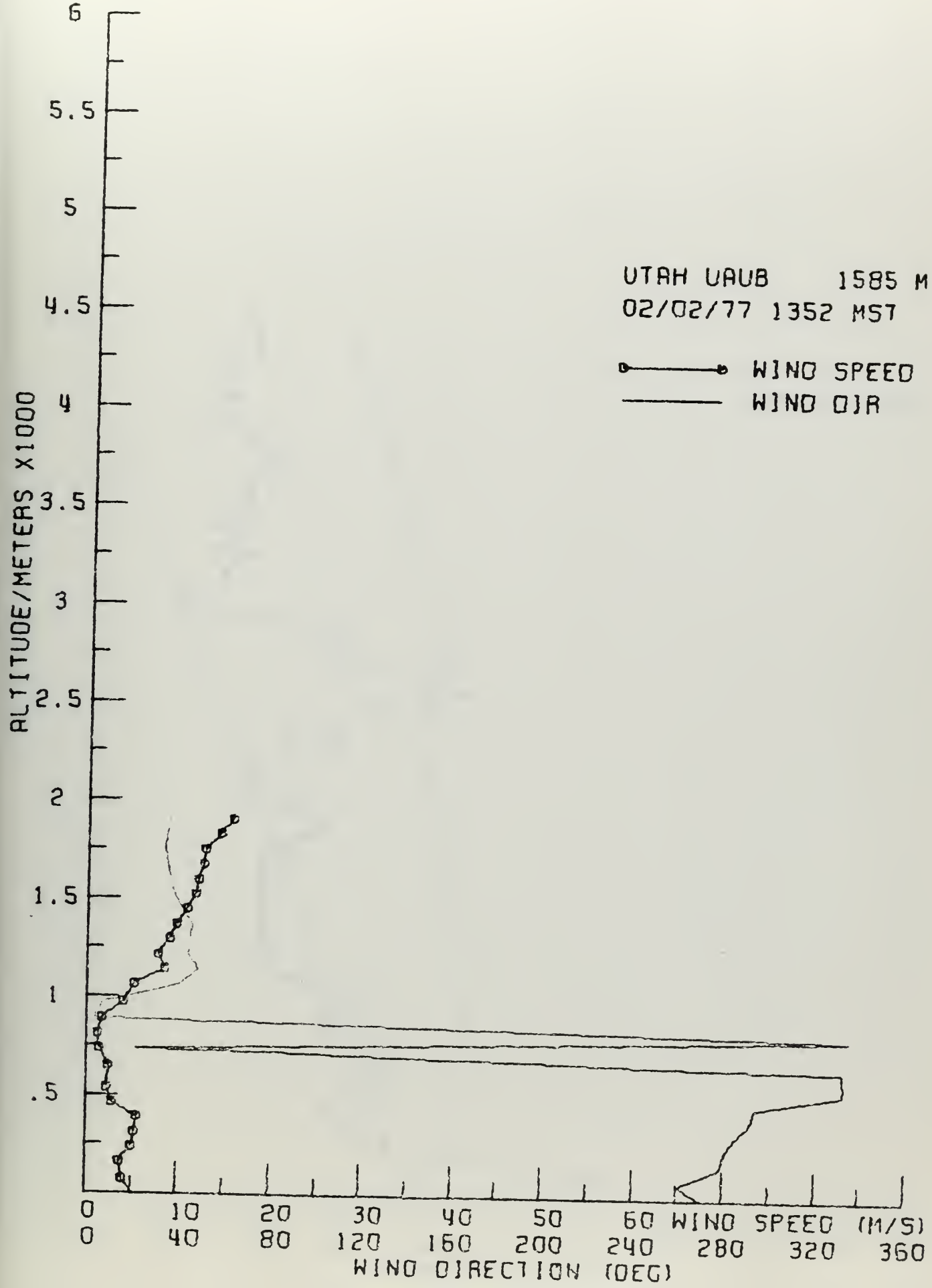
DATE 02/28/77 TIME 06:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

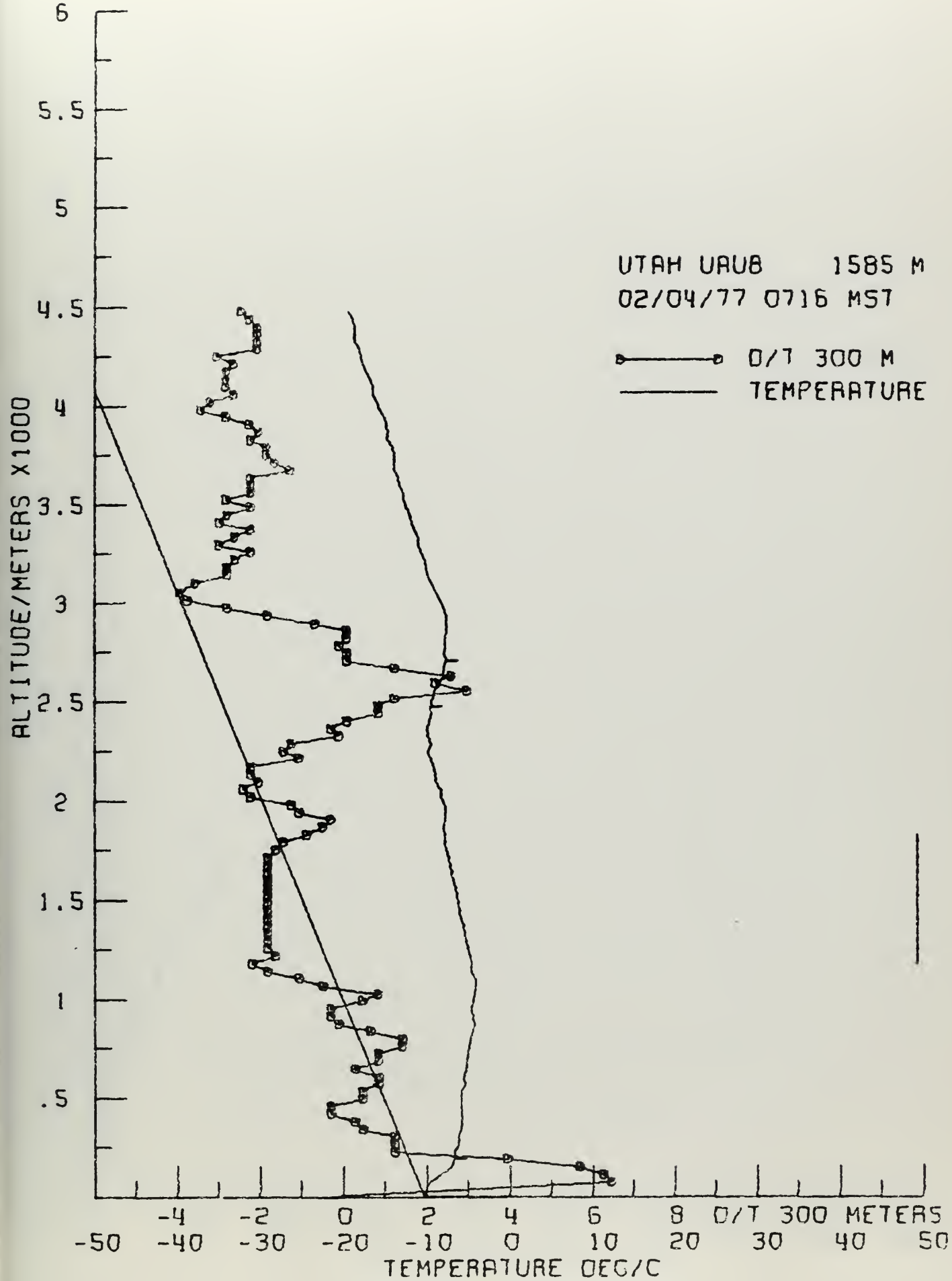
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.2	2.2	3.1	135.
0.5	76.	1661.	-1.2	3.0	3.2	158.
1.0	152.	1737.	-2.1	4.2	4.7	154.
1.5	229.	1814.	-1.6	4.9	5.2	162.
2.0	305.	1890.	-0.3	4.0	4.0	176.
2.5	381.	1966.	1.0	3.3	3.5	196.
3.0	457.	2042.	2.3	1.9	3.0	229.
3.5	533.	2118.	3.3	1.1	3.5	251.
4.0	610.	2195.	3.2	0.9	3.4	255.
4.5	686.	2271.	2.3	1.5	2.8	238.
5.0	762.	2347.	1.8	2.3	3.0	218.
5.5	838.	2423.	2.5	3.4	4.2	216.
6.0	914.	2499.	3.2	2.9	4.3	228.
6.5	1000.	2585.	3.8	2.4	4.5	237.
7.0	1076.	2661.	4.1	0.5	4.1	263.
7.5	1156.	2741.	5.4	-0.1	5.4	271.
8.0	1232.	2817.	6.2	-1.0	6.3	279.
8.5	1309.	2894.	5.4	-0.7	5.4	278.
9.0	1385.	2970.	4.7	0.3	4.7	266.
9.5	1461.	3046.	3.4	0.7	3.4	258.
10.0	1537.	3122.	3.5	-0.3	3.5	276.
10.5	1613.	3198.	4.1	-1.0	4.2	284.
11.0	1690.	3275.	4.3	-1.8	4.6	292.
11.5	1766.	3351.	4.9	-2.3	5.4	295.
12.0	1842.	3427.	5.3	-2.6	5.9	296.

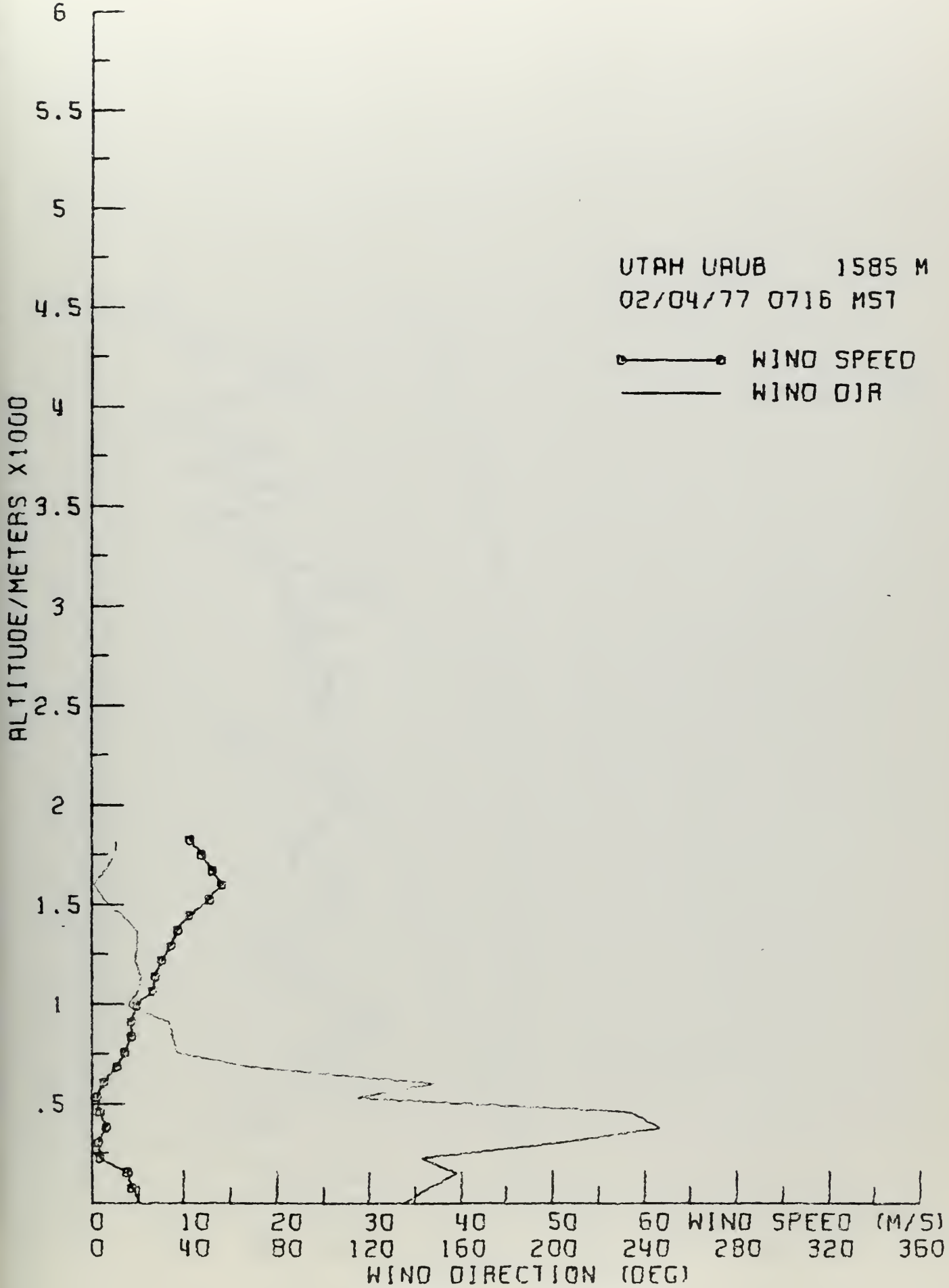

UTAH UAUB 1585 M
02/02/77 0702 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
O/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

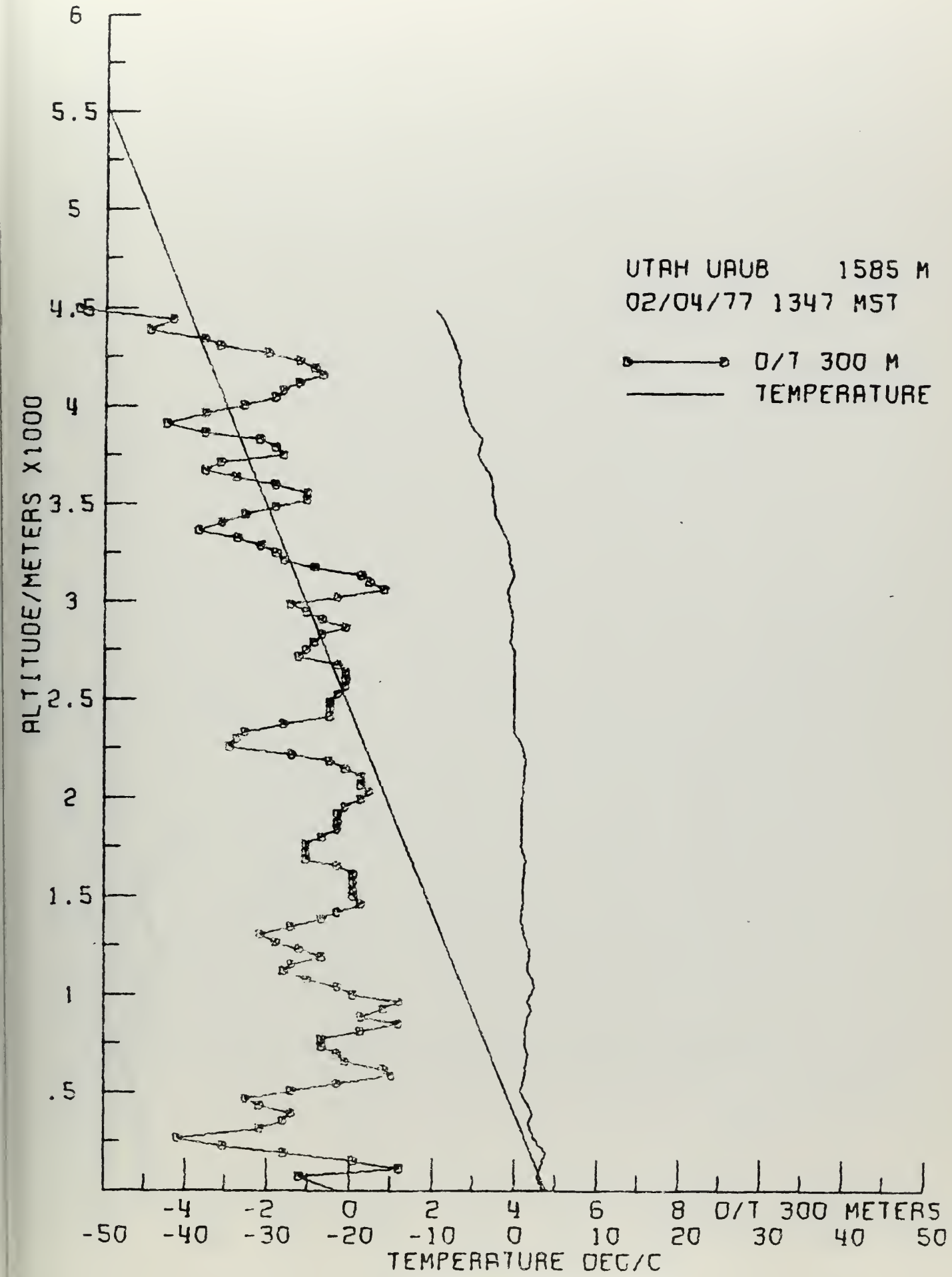

UTAH UAU8 1585 M
02/02/77 0702 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

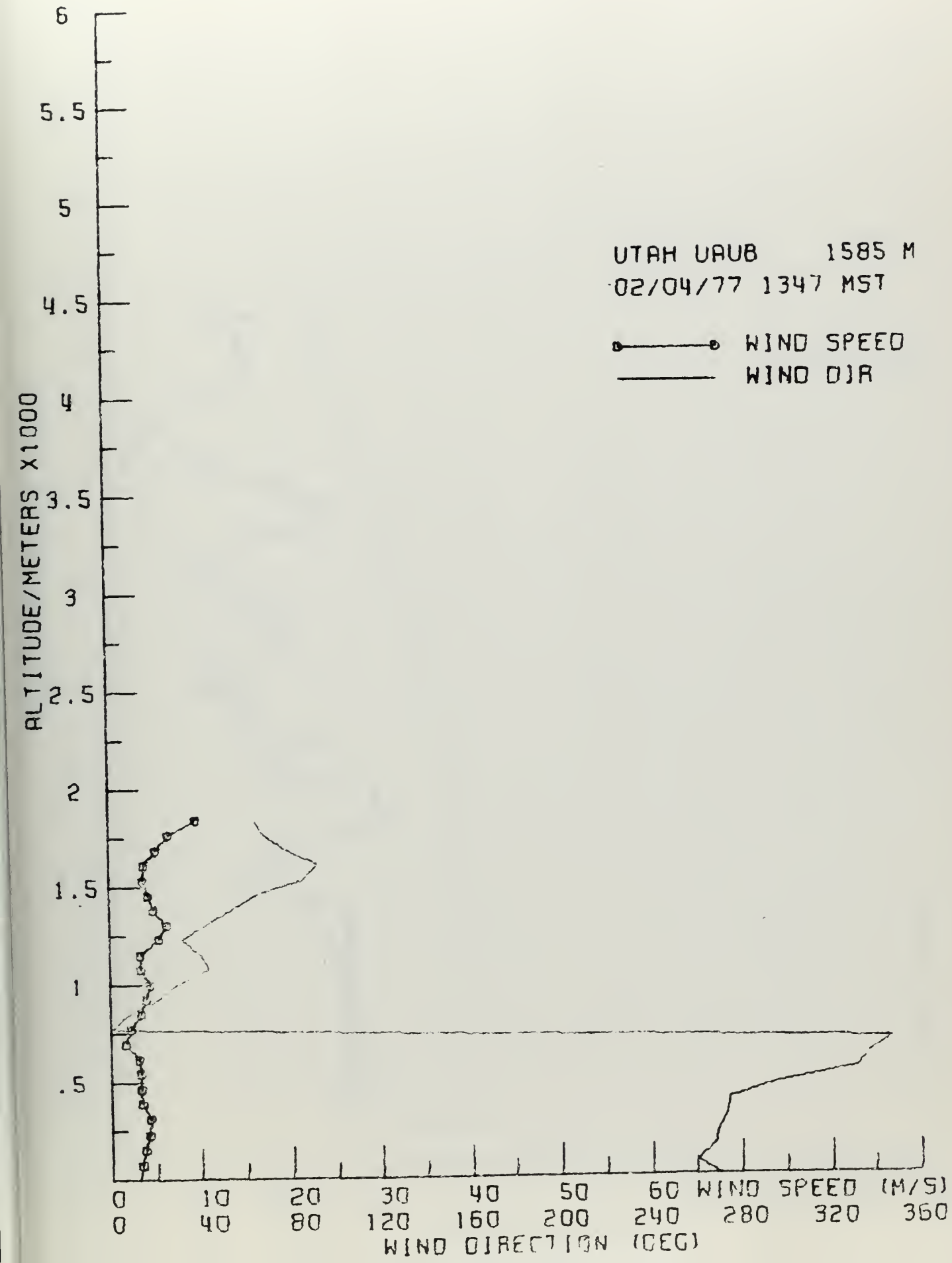

UTAH UAUB 1585 M
02/02/77 1352 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

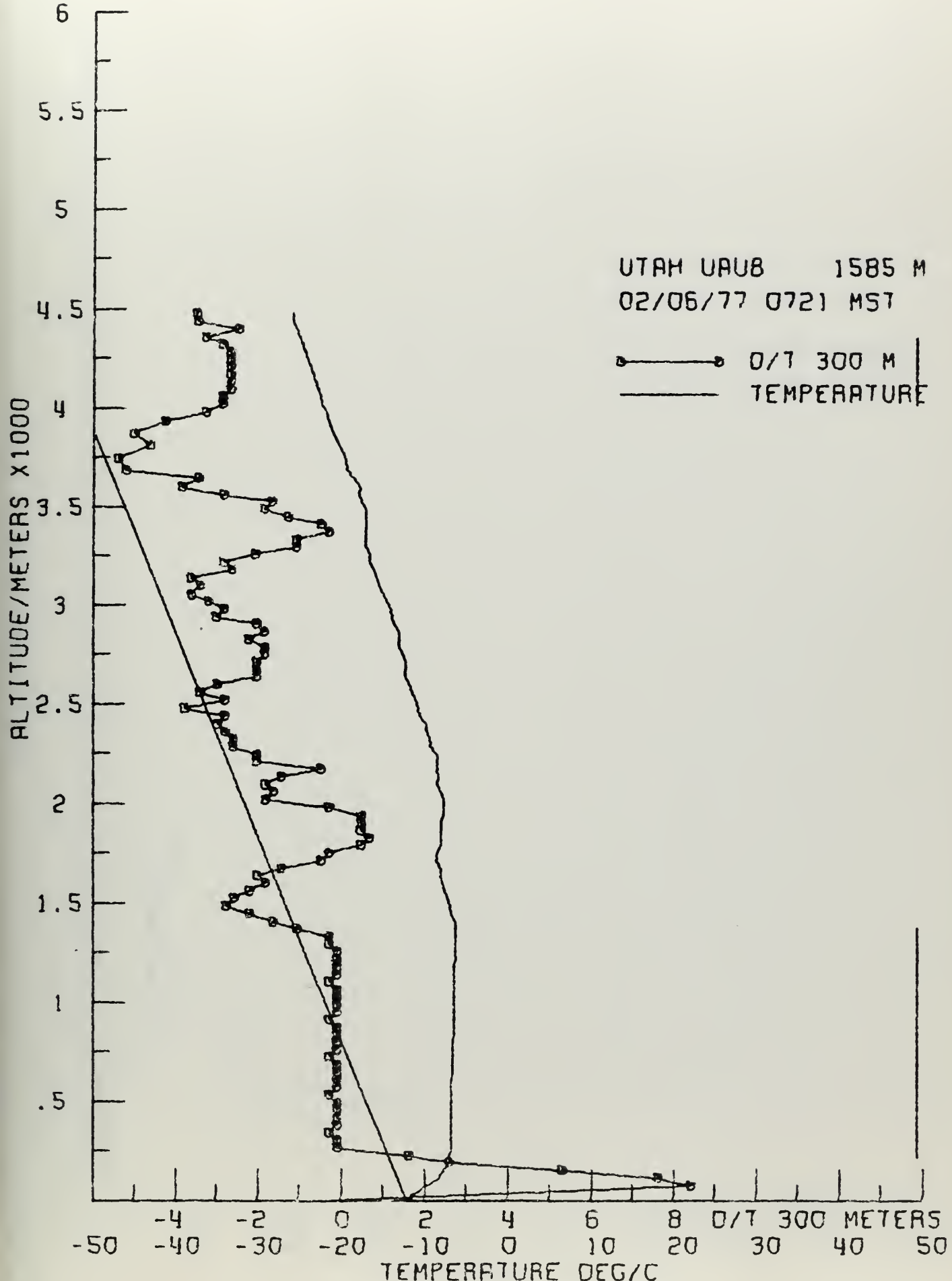

UTAH UAUB 1585 M
02/02/77 1352 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

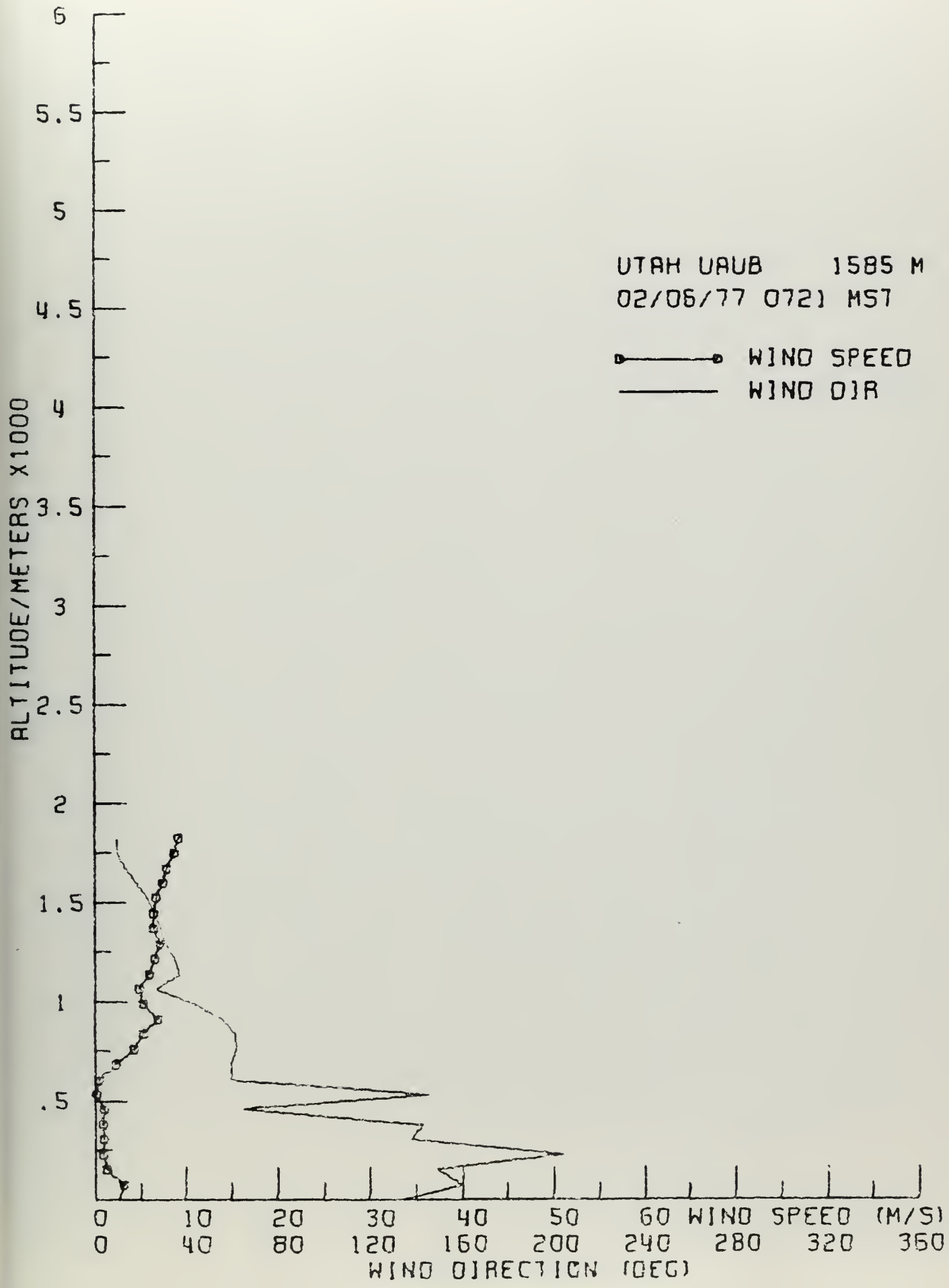

UTAH UAU8 1585 M
02/04/77 0716 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

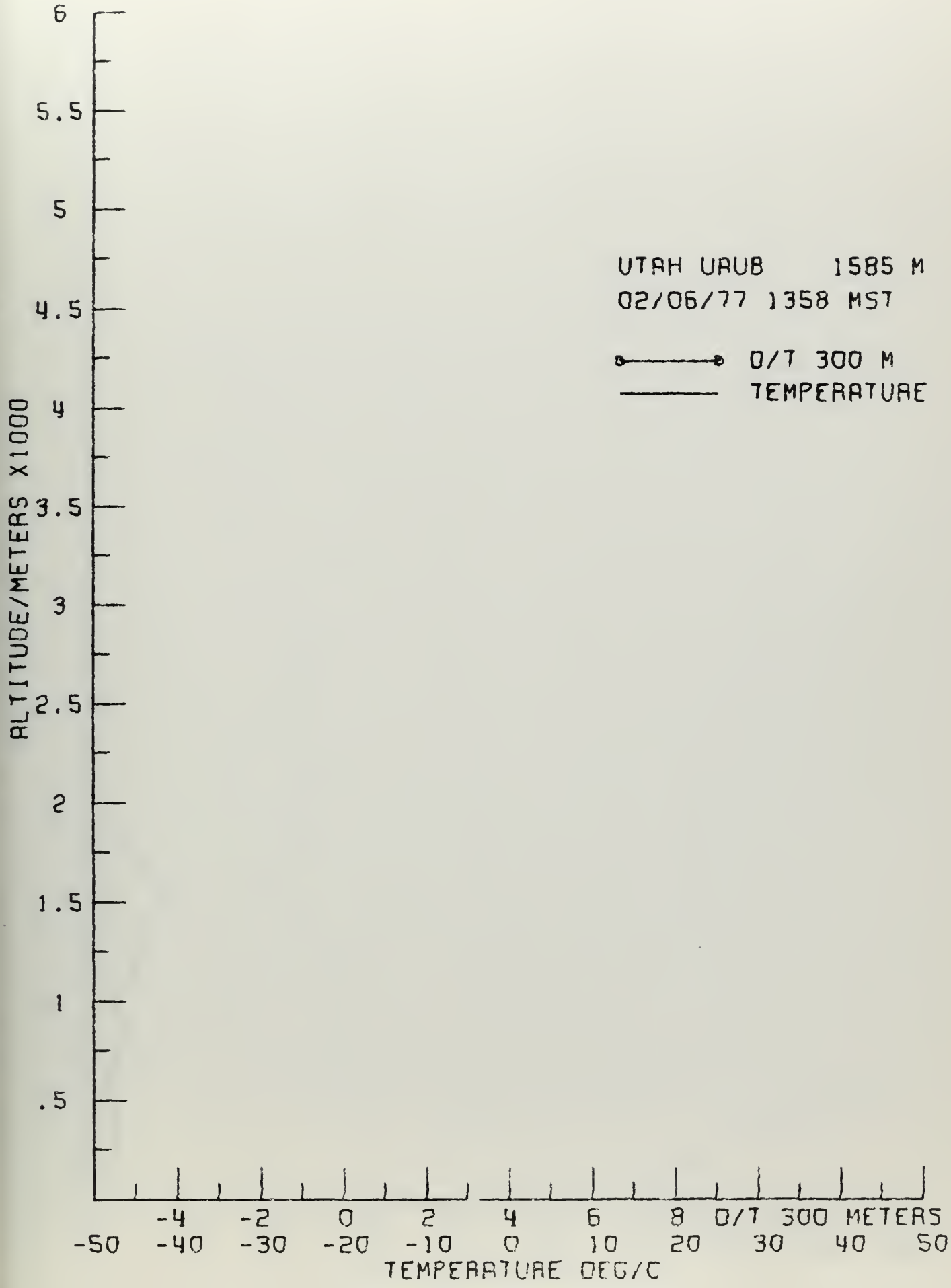

UTAH UAUB 1585 M
02/04/77 0716 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

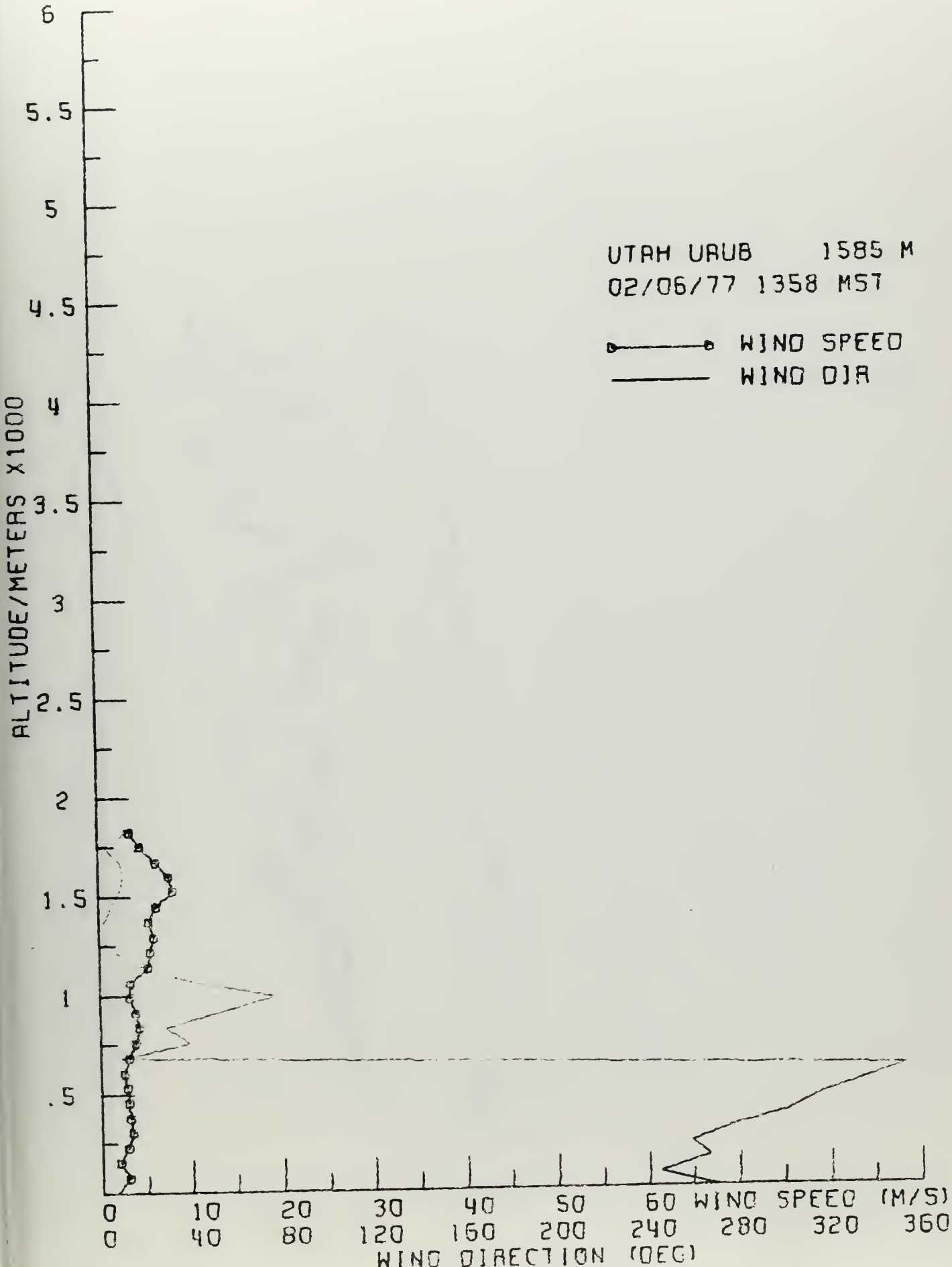

UTAH UAUB 1585 M
02/04/77 1347 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

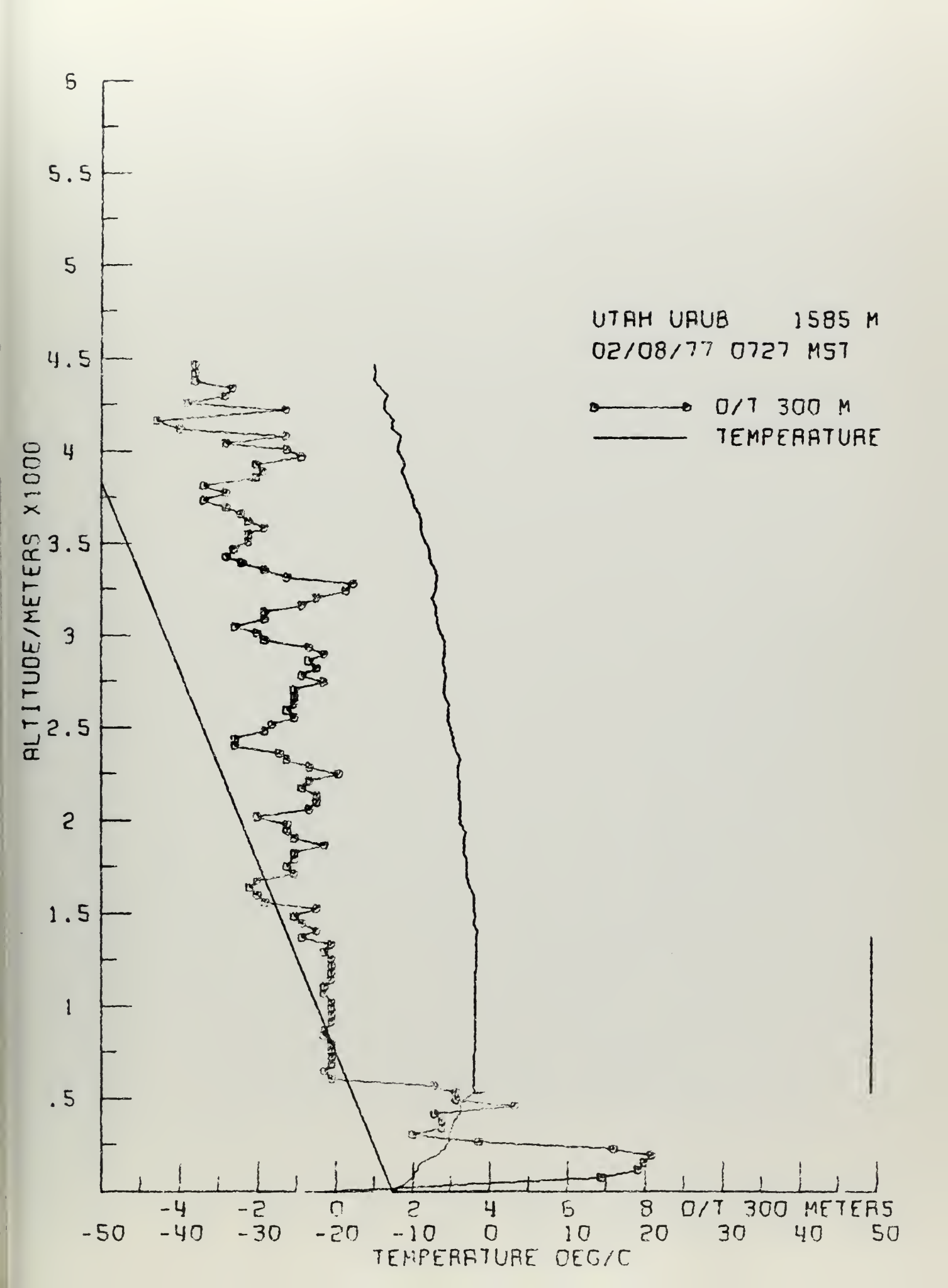

UTAH UAUB 1585 M
02/04/77 1347 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

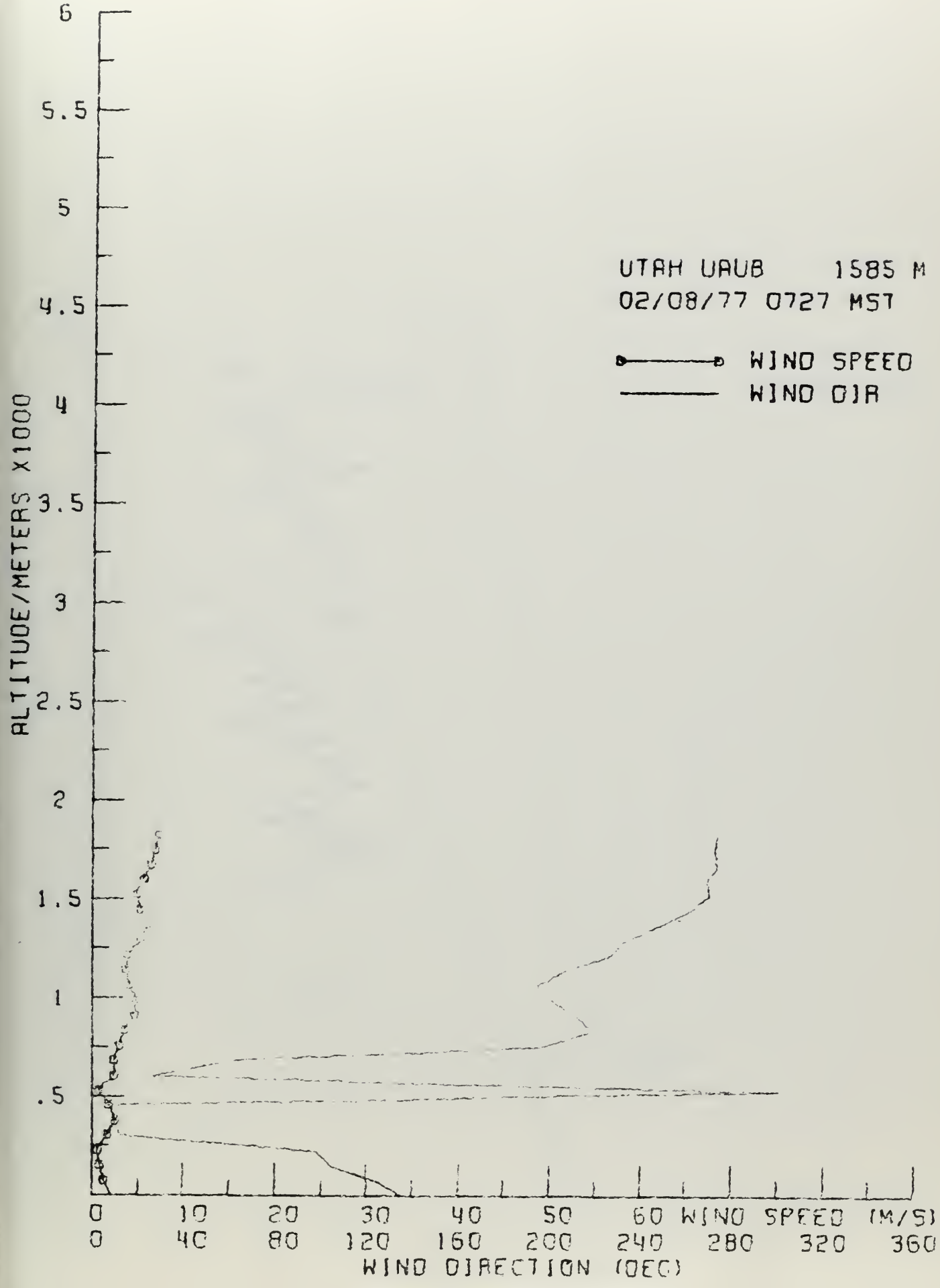

UTAH UAU8 1585 M
02/06/77 0721 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

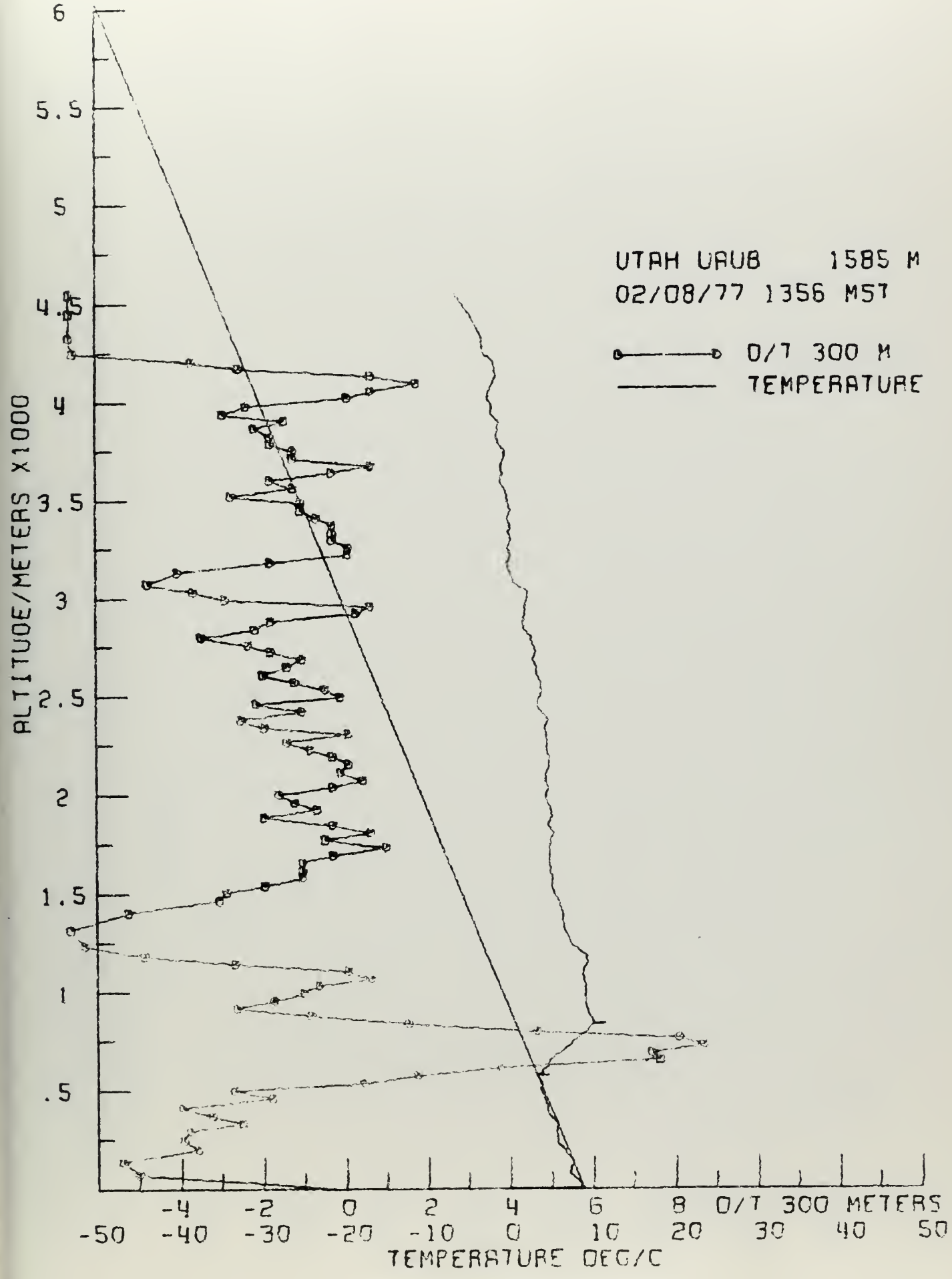

UTAH UAUB 1585 M
02/06/77 0721 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

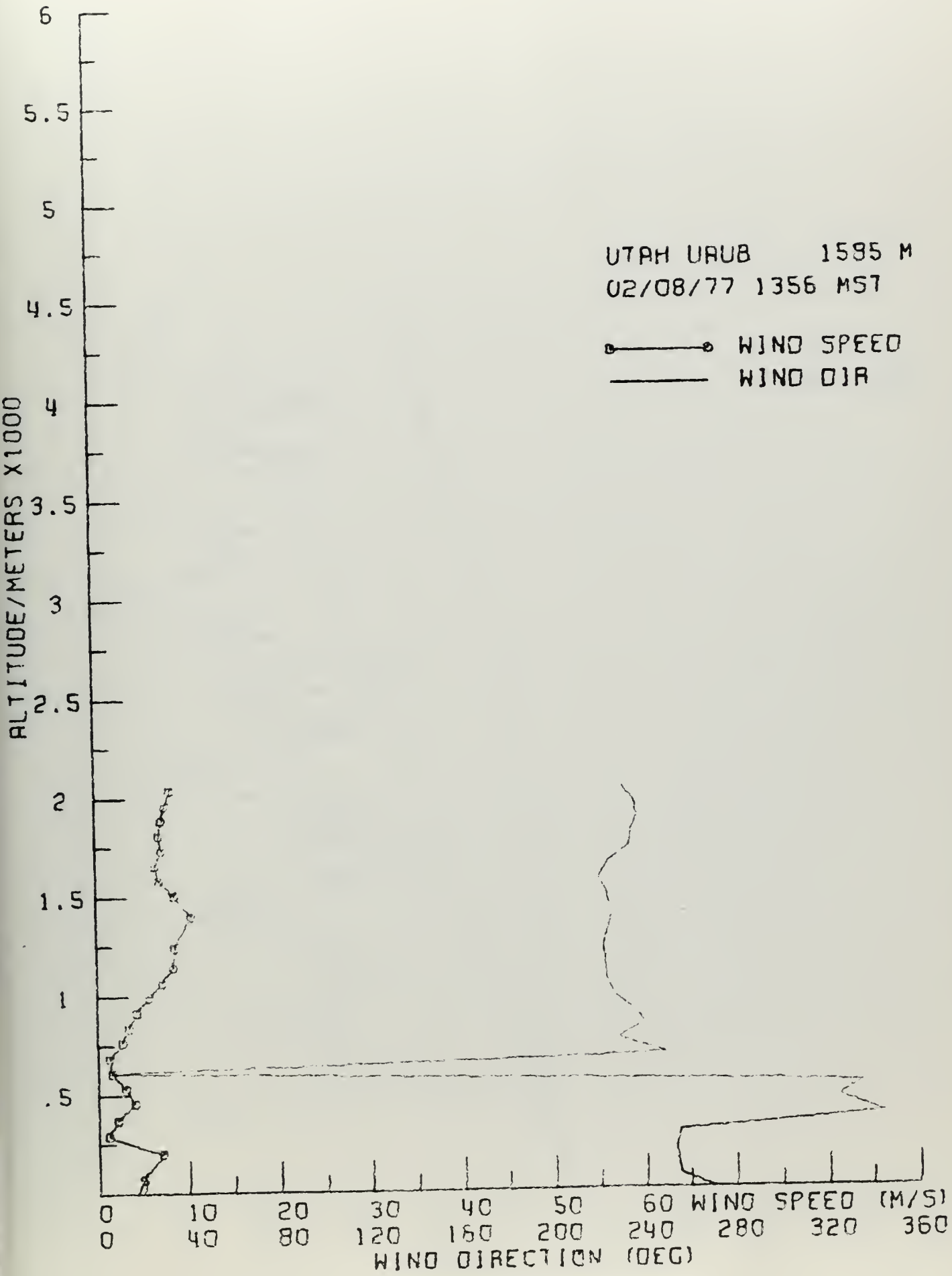

UTAH UAUB 1585 M
02/06/77 1358 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

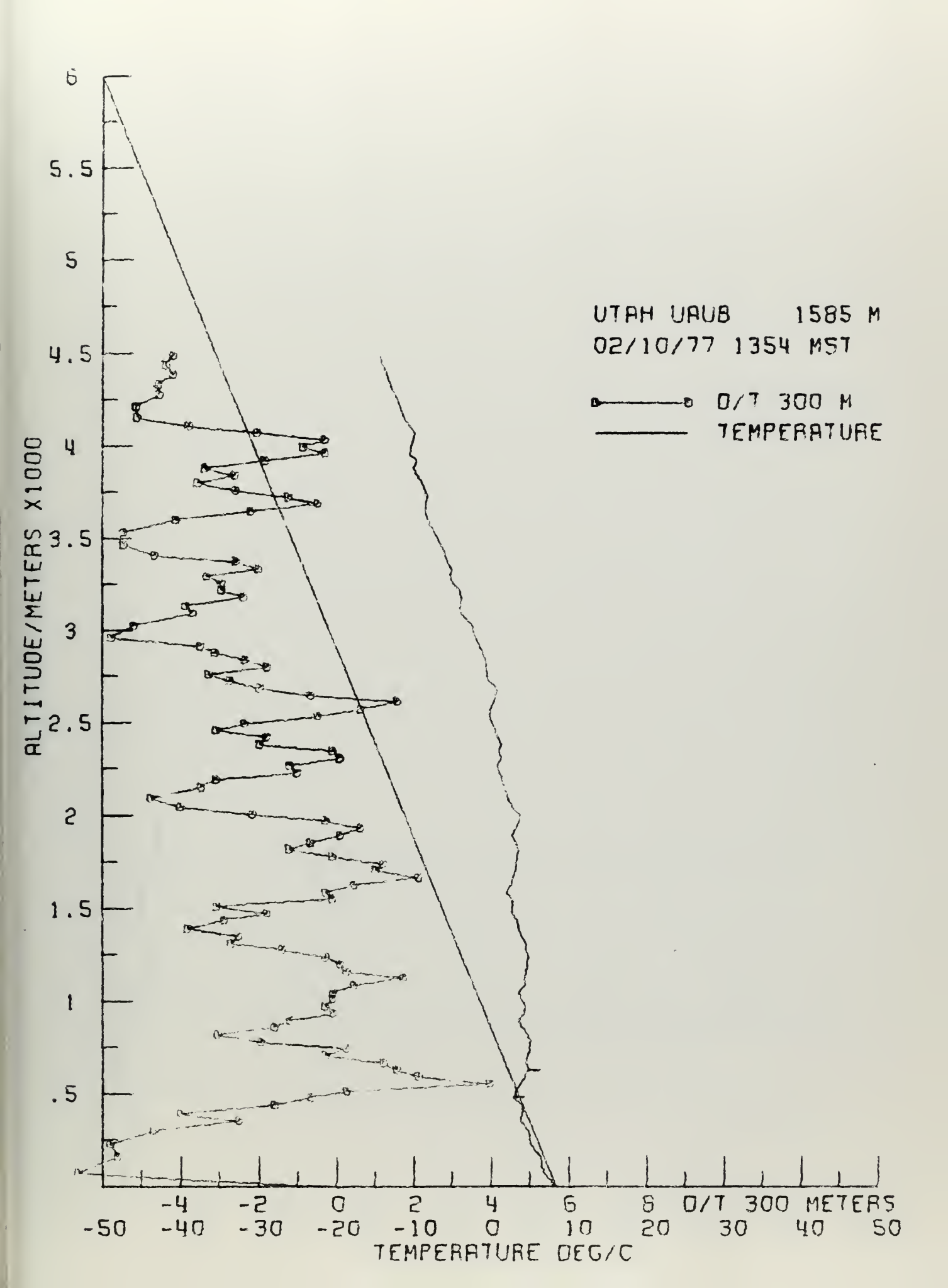

UTAH UAUB 1585 M
02/06/77 1358 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

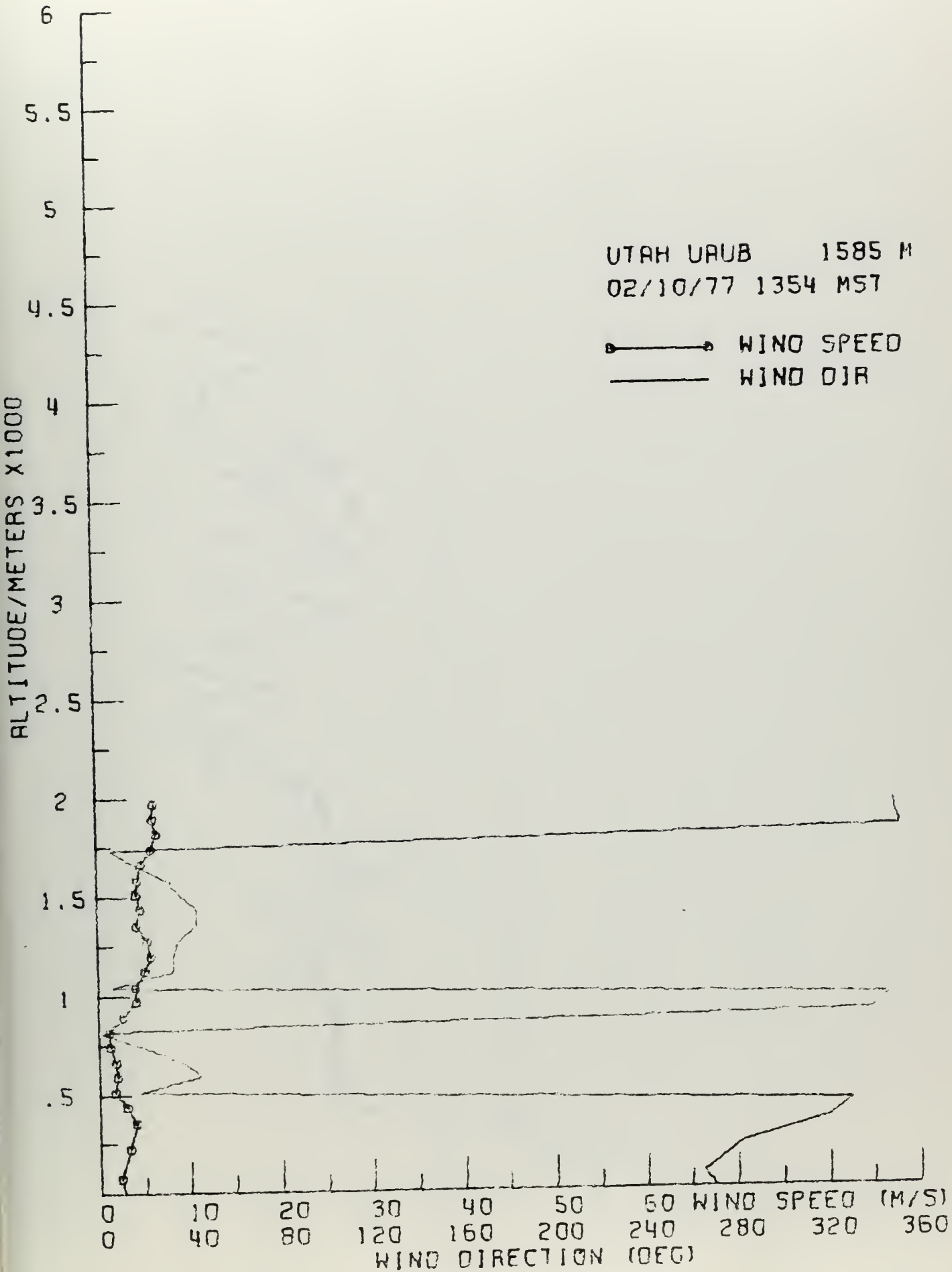

UTAH UAUB 1585 M
02/08/77 0727 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

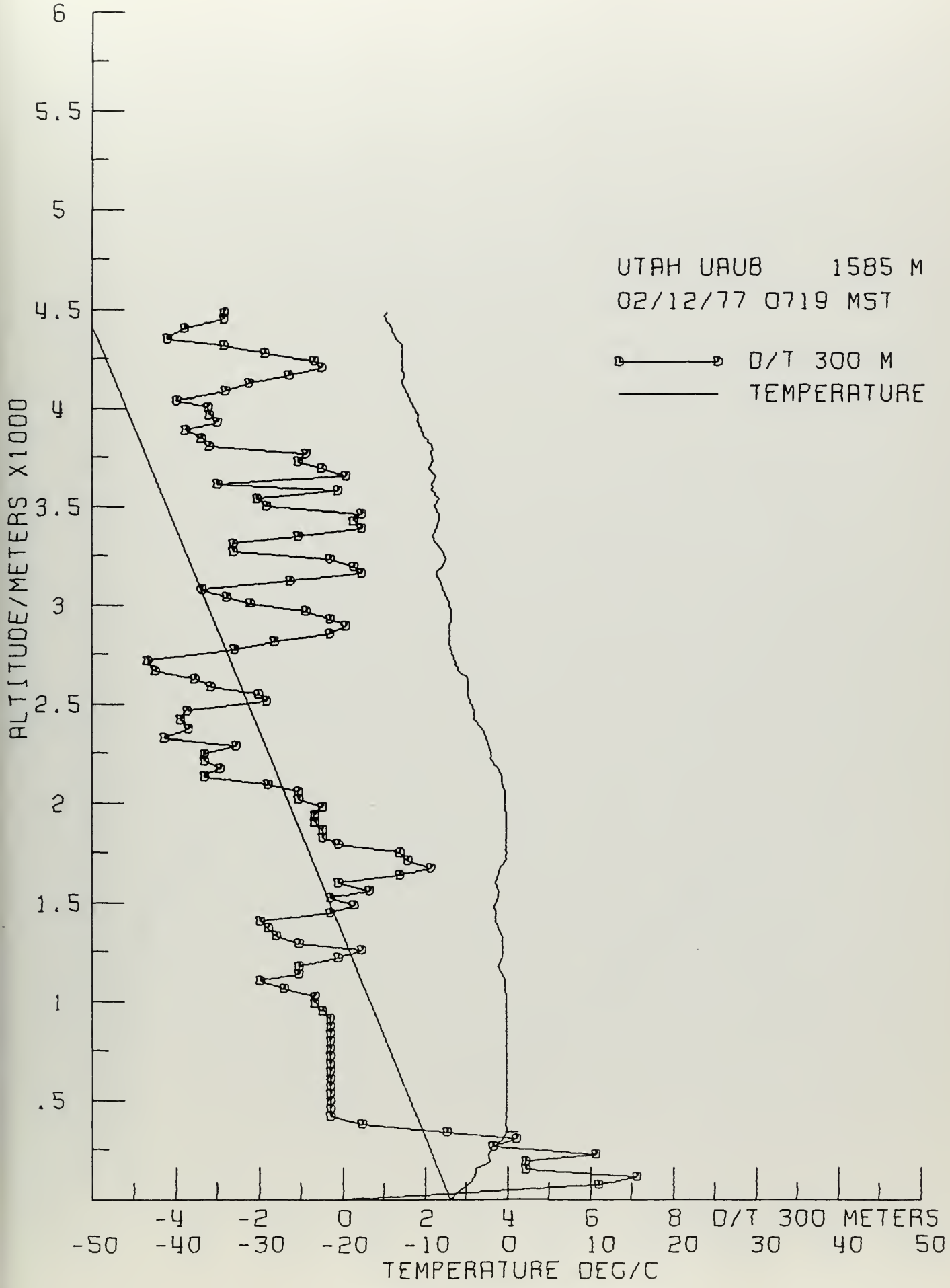

UTAH UAUB 1585 M
02/08/77 0727 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

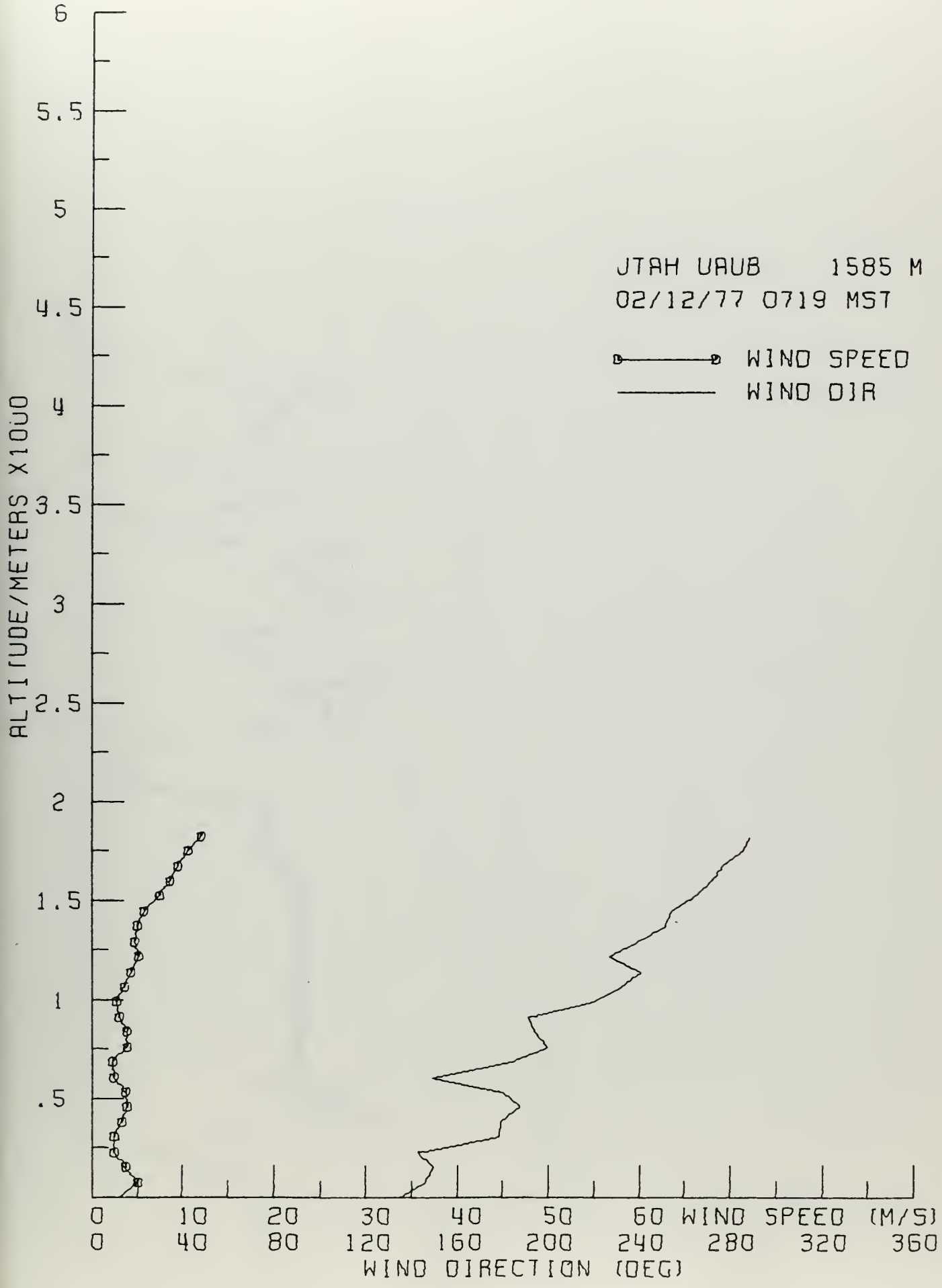

UTAH UAUB 1585 M
02/08/77 1356 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
O/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

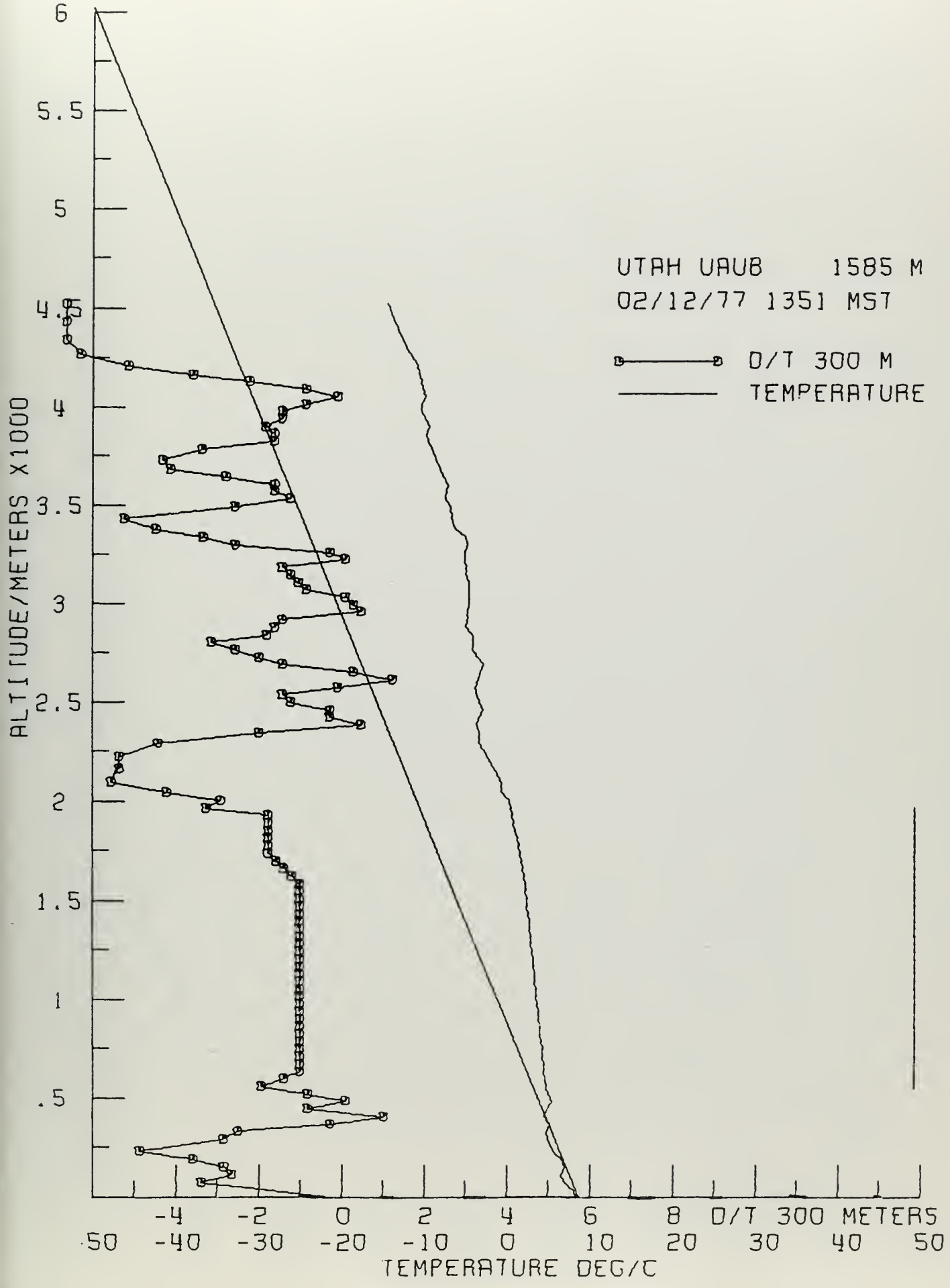

UTAH UAUB 1585 M
02/08/77 1356 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

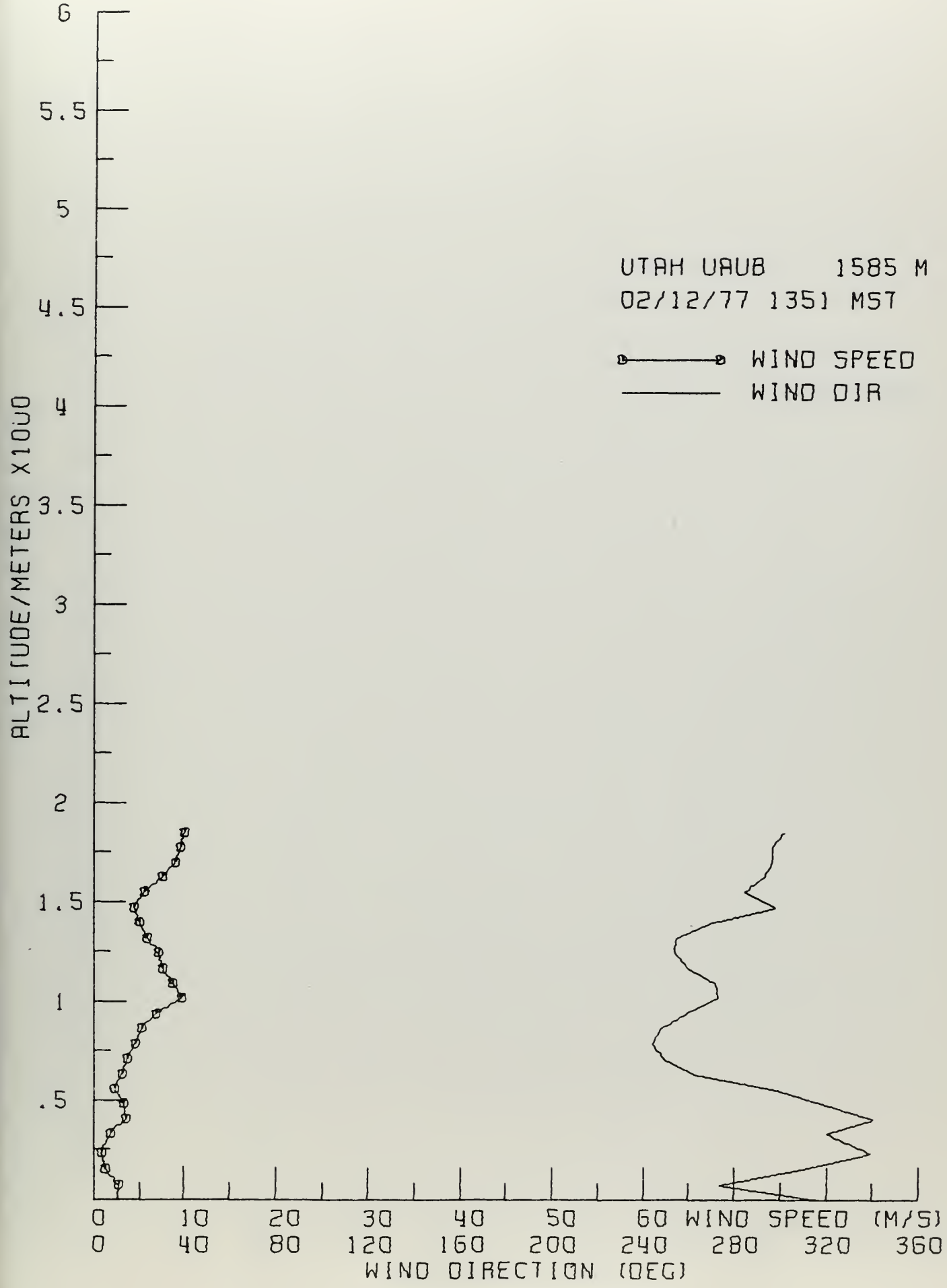

UTAH UAUB 1585 M
02/10/77 1354 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
O/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

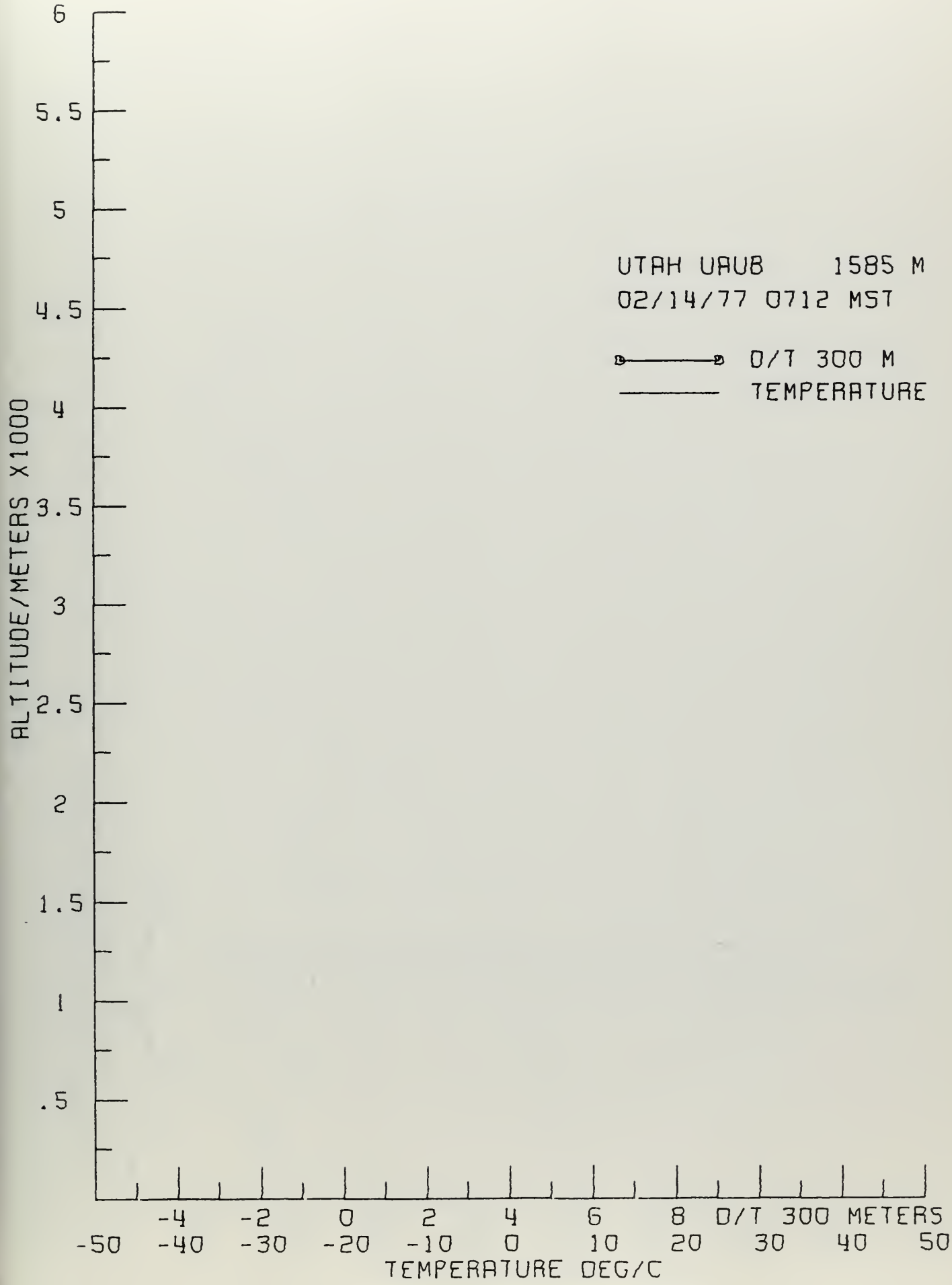

UTAH UAUB 1585 M
02/10/77 1354 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

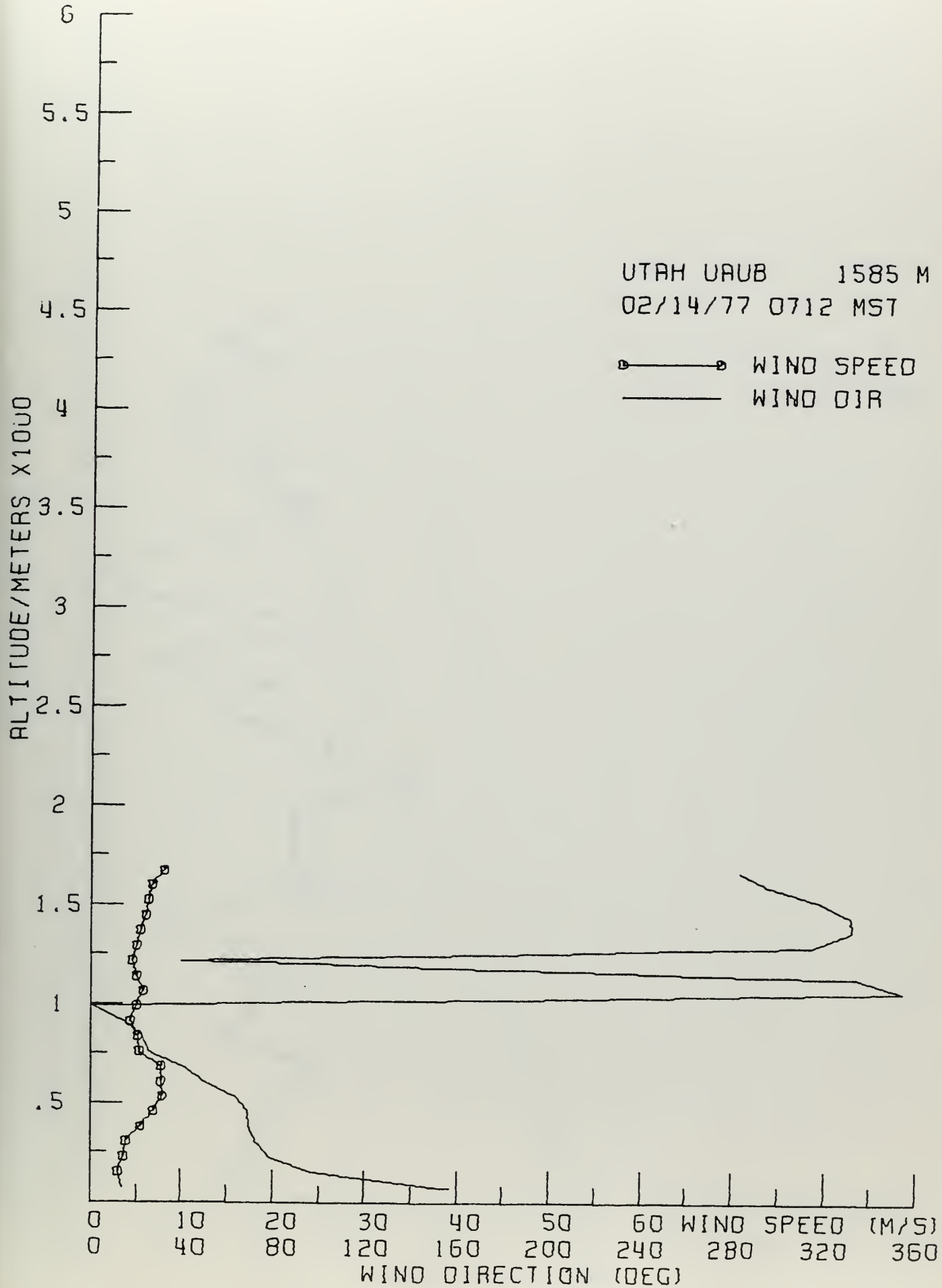

UTAH UAUB 1585 M
02/12/77 0719 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
O/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

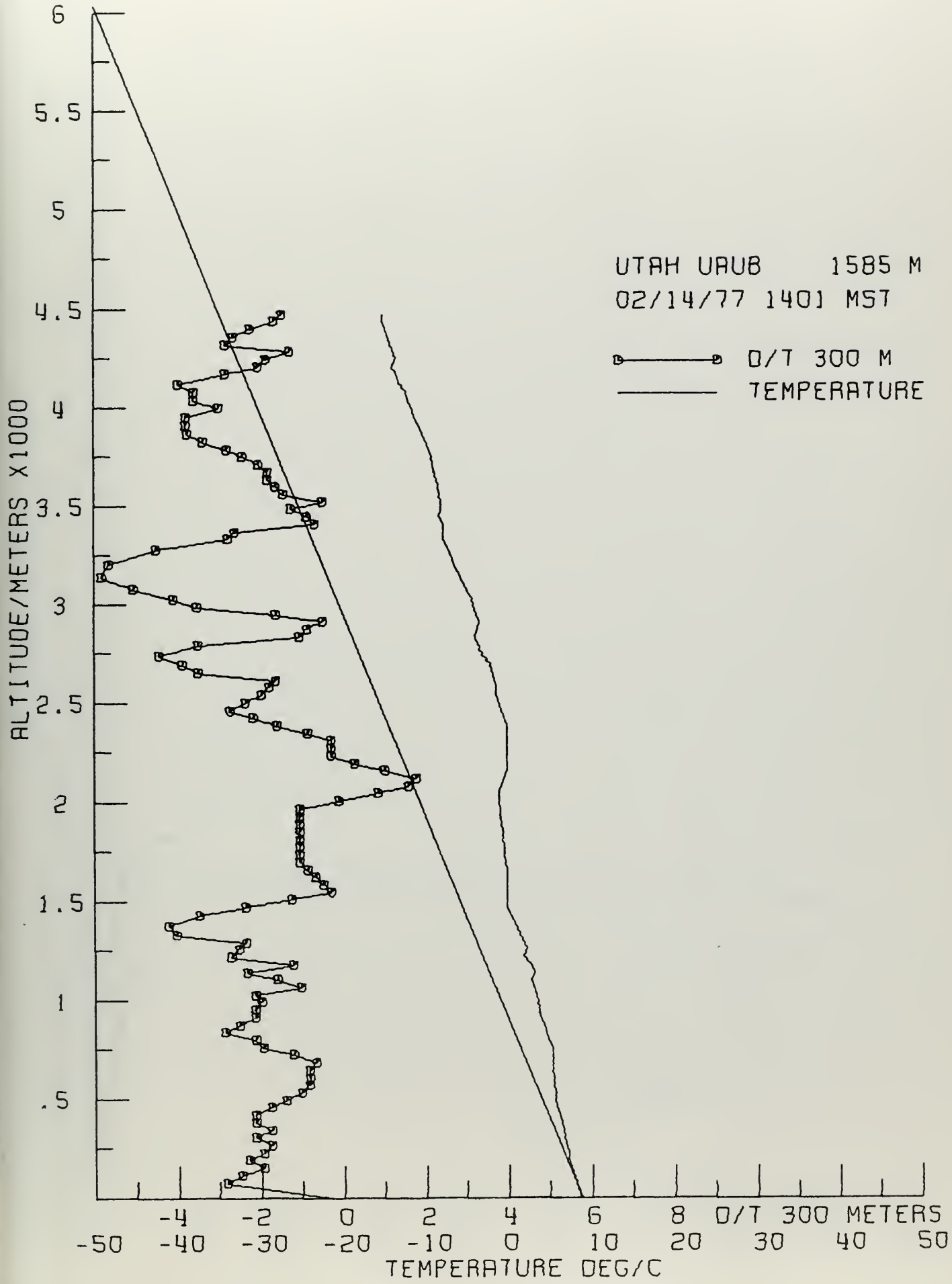

JTAH UAUB 1585 M
02/12/77 0719 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

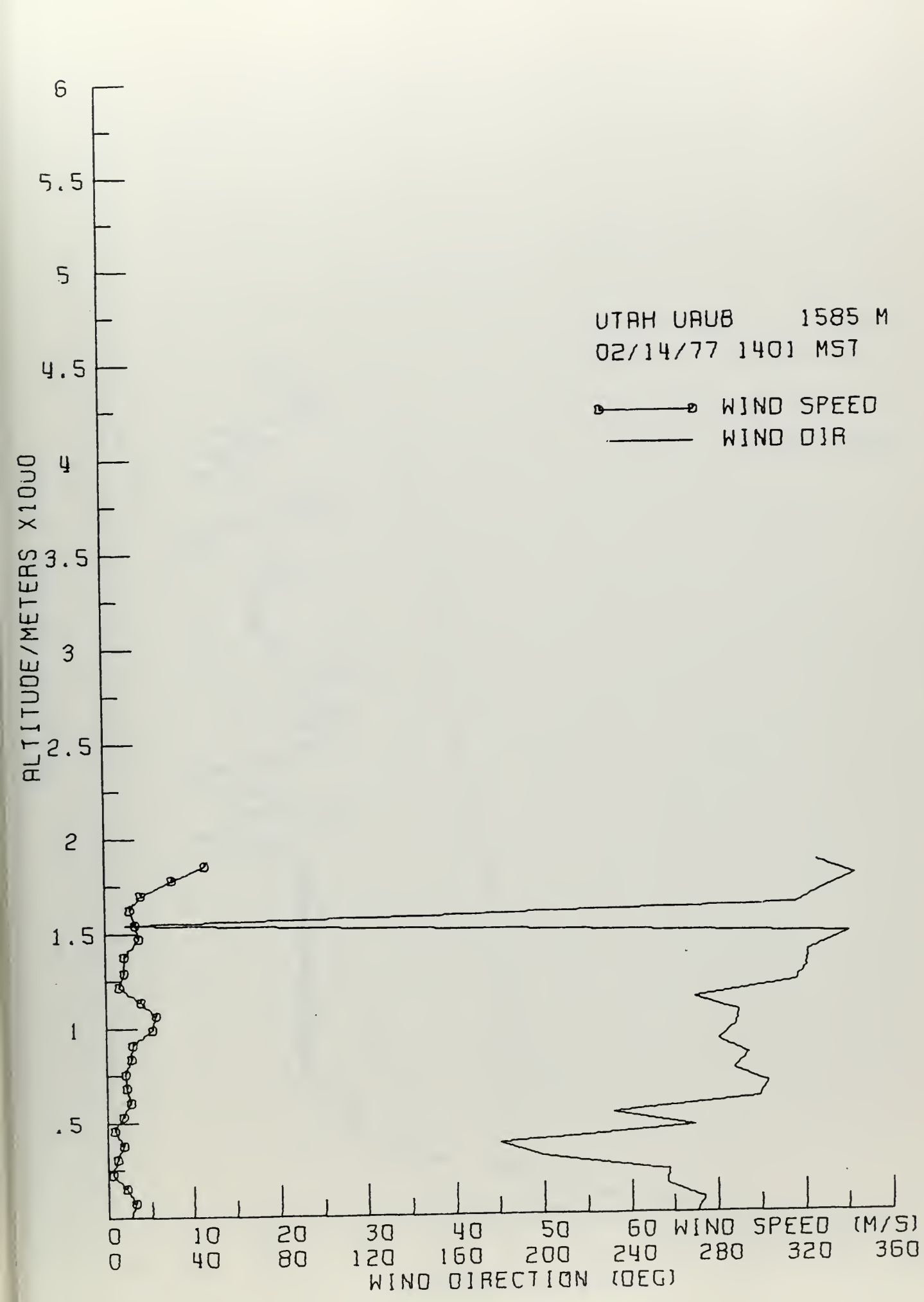

UTAH UAUB 1585 M
02/12/77 1351 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

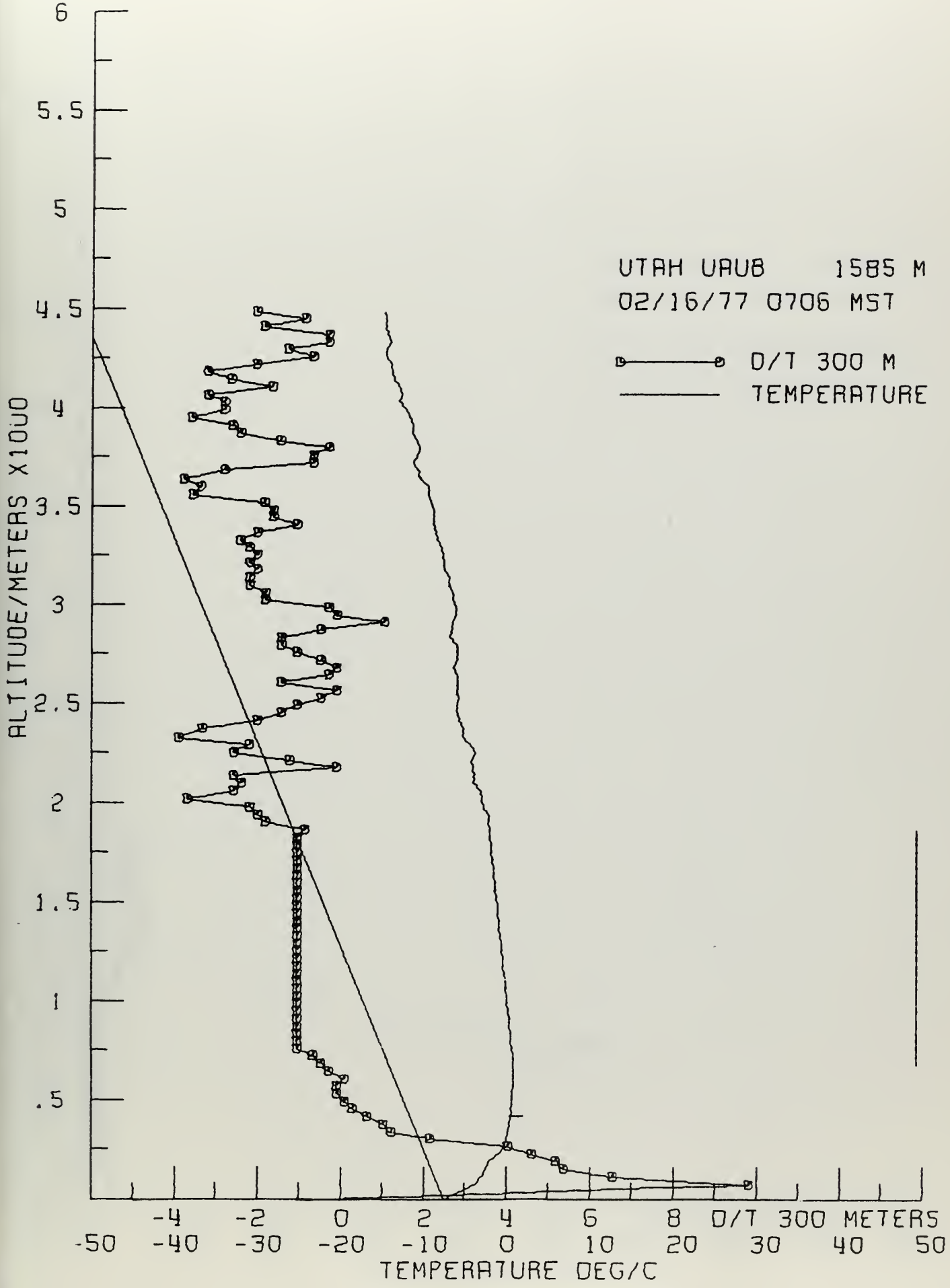

UTAH UAUB 1585 M
02/12/77 1351 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

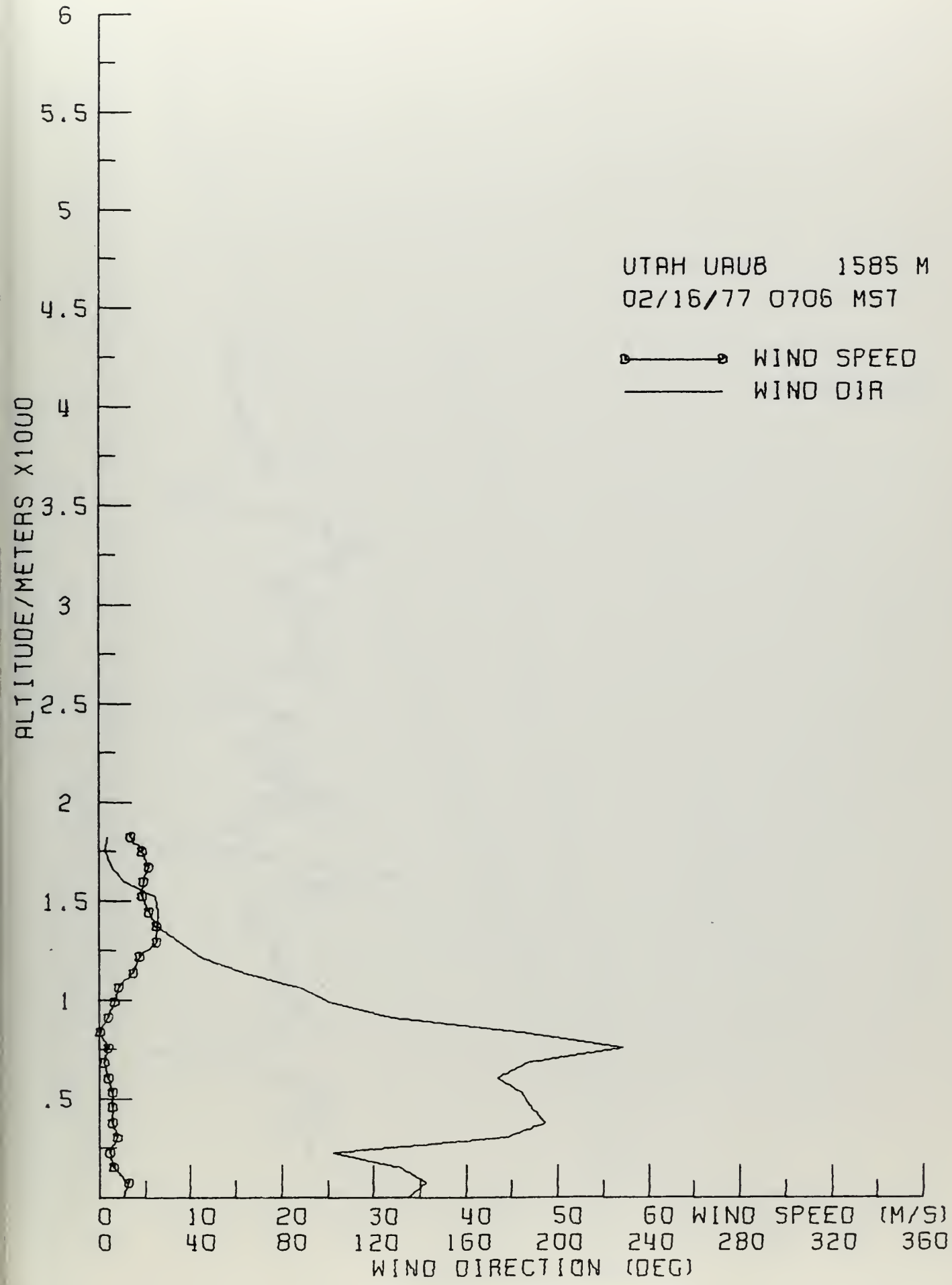

UTAH UAUB 1585 M
02/14/77 0712 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

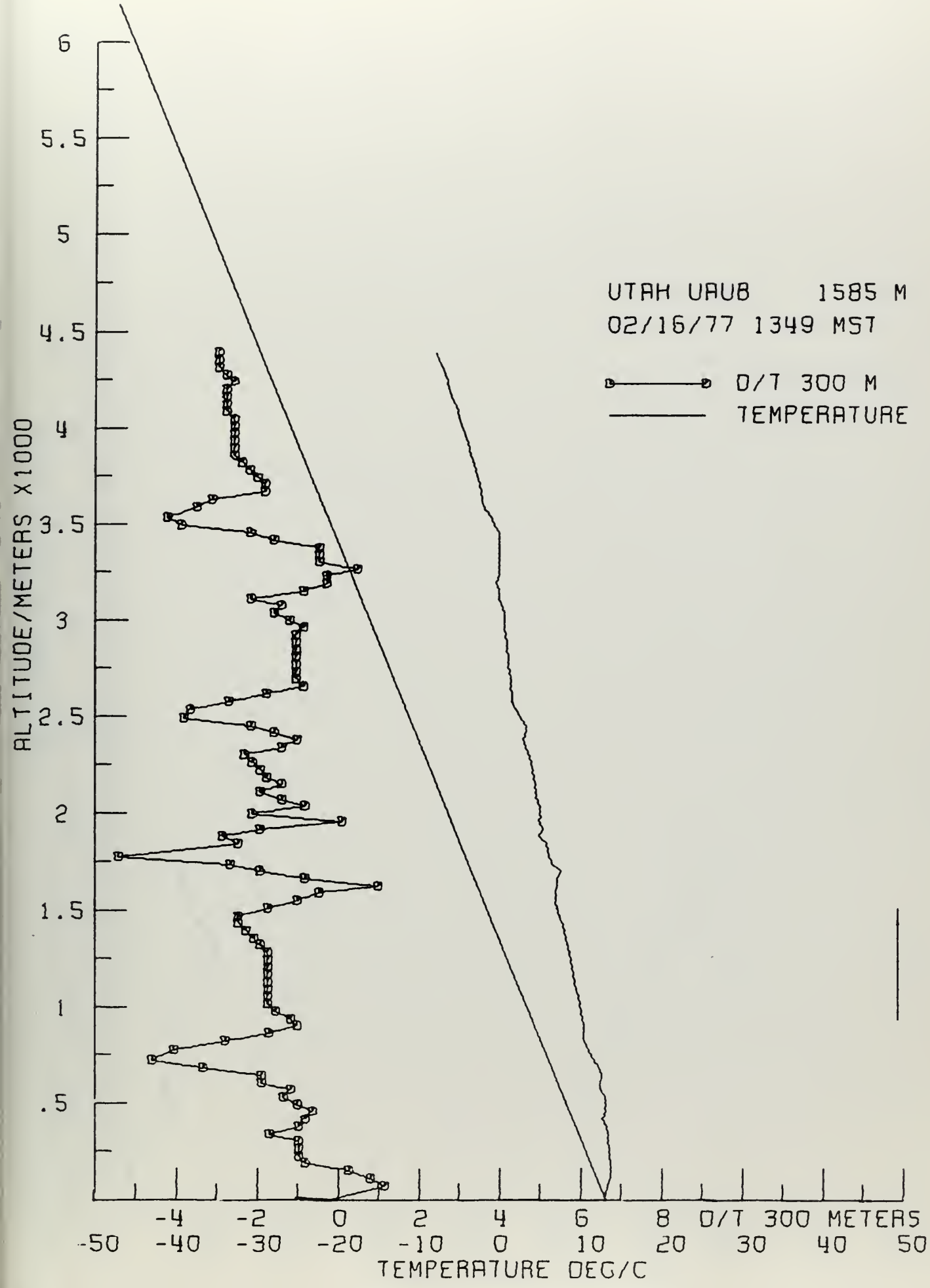

UTAH UAUB 1585 M
02/14/77 0712 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

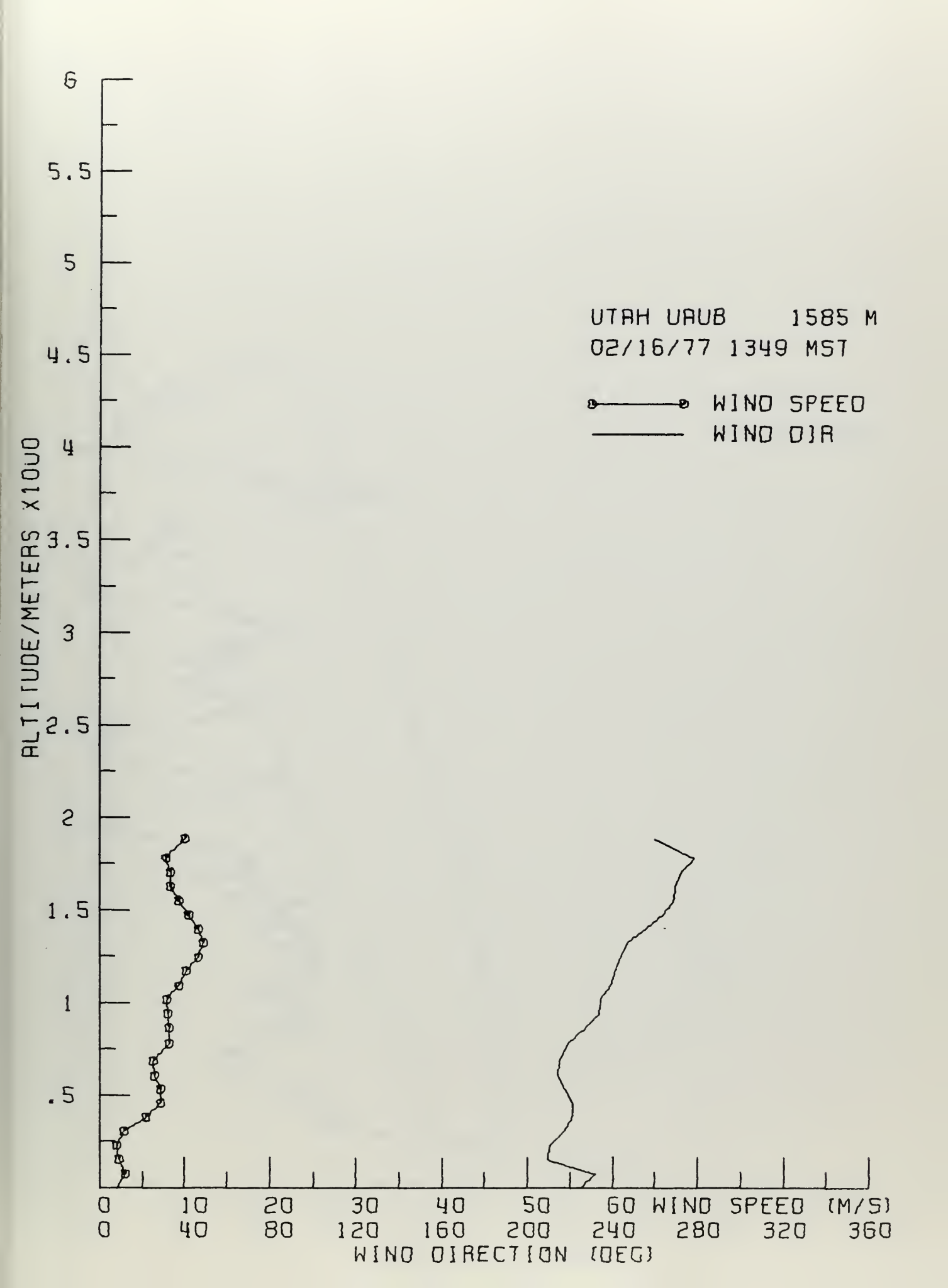

UTAH UAUB 1585 M
02/14/77 1401 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

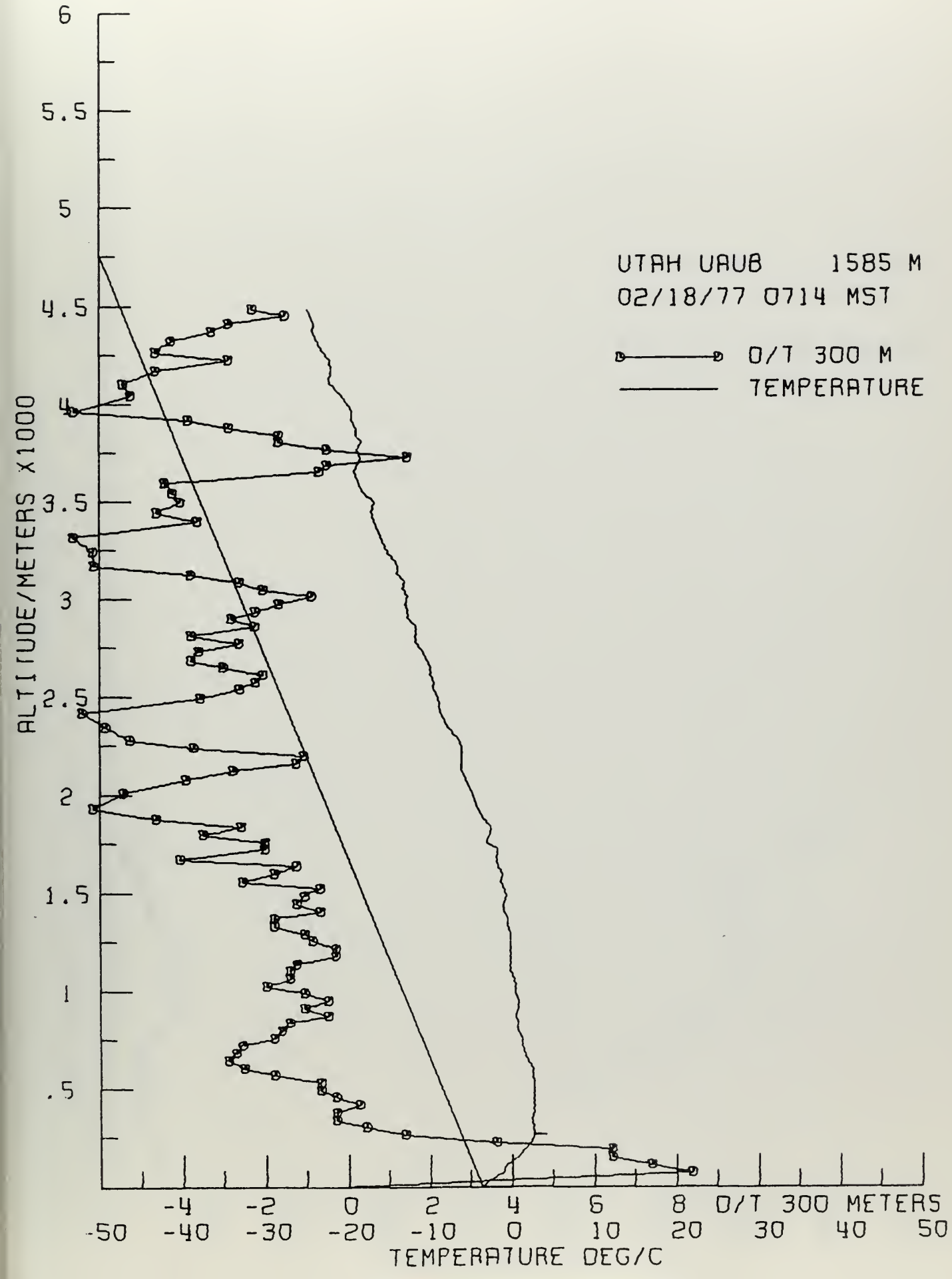

UTAH UAUB 1585 M
02/14/77 1401 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

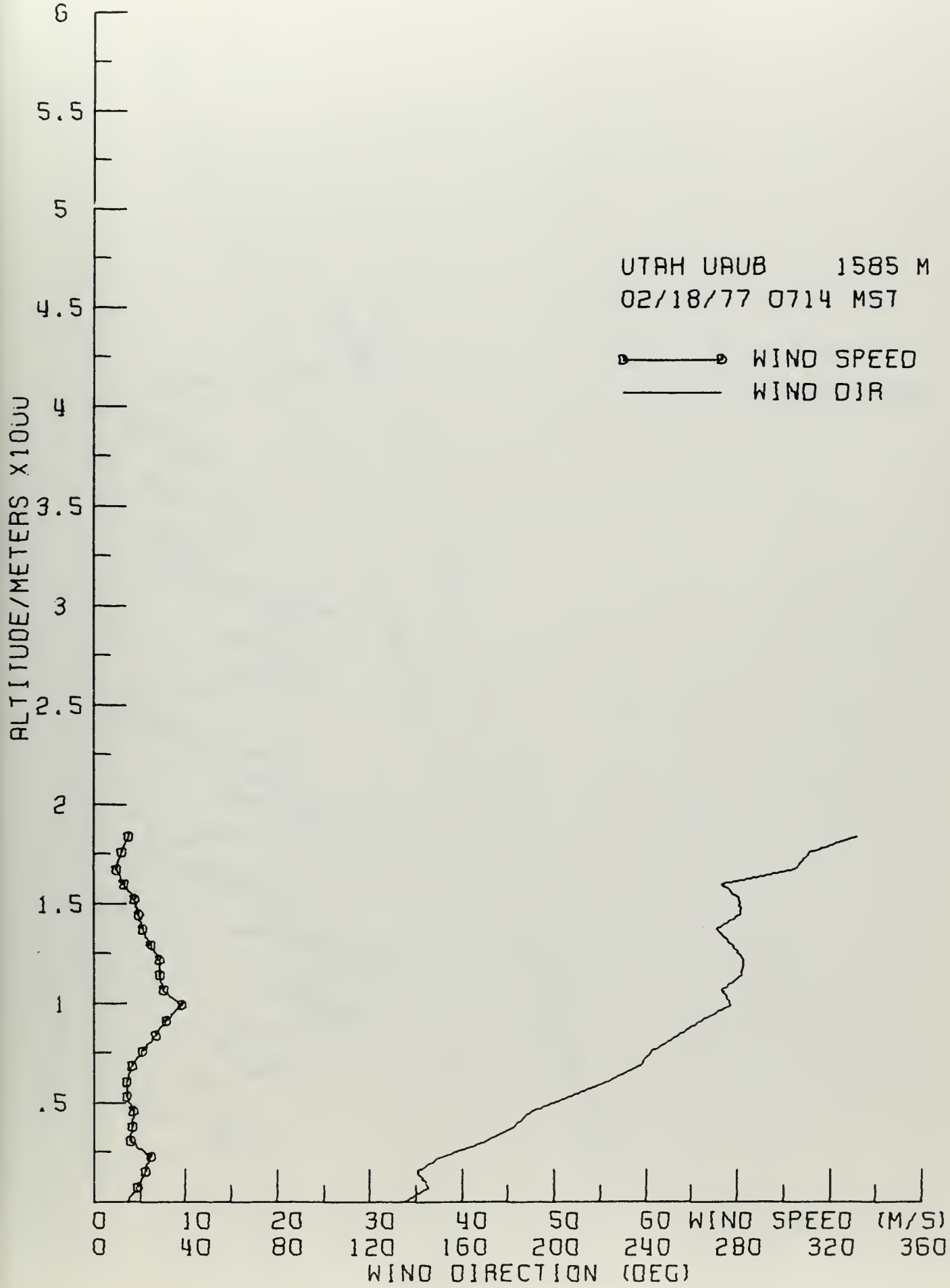

UTAH UAUB 1585 M
02/16/77 0706 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

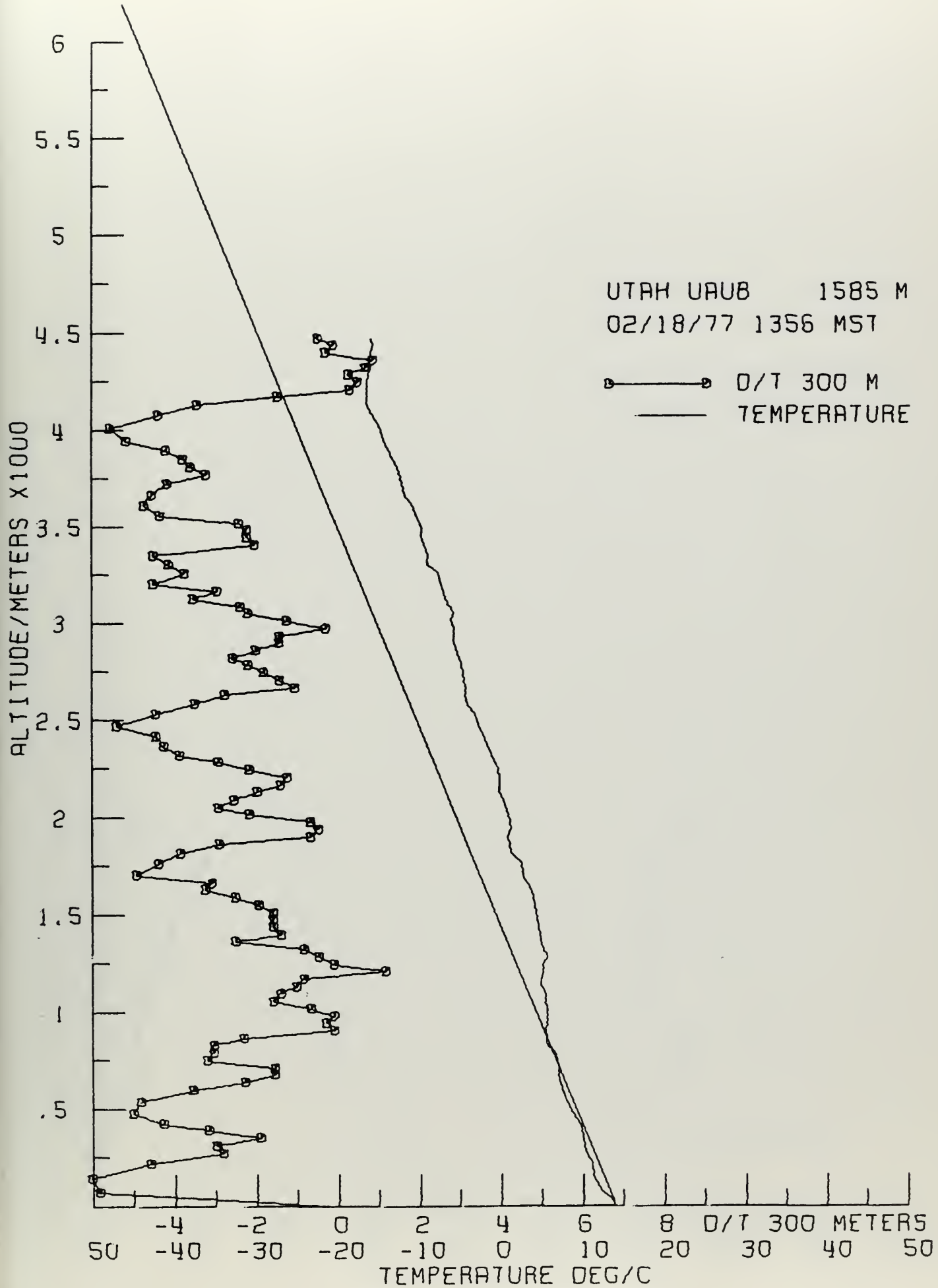

UTAH UAUB 1585 M
02/16/77 0706 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

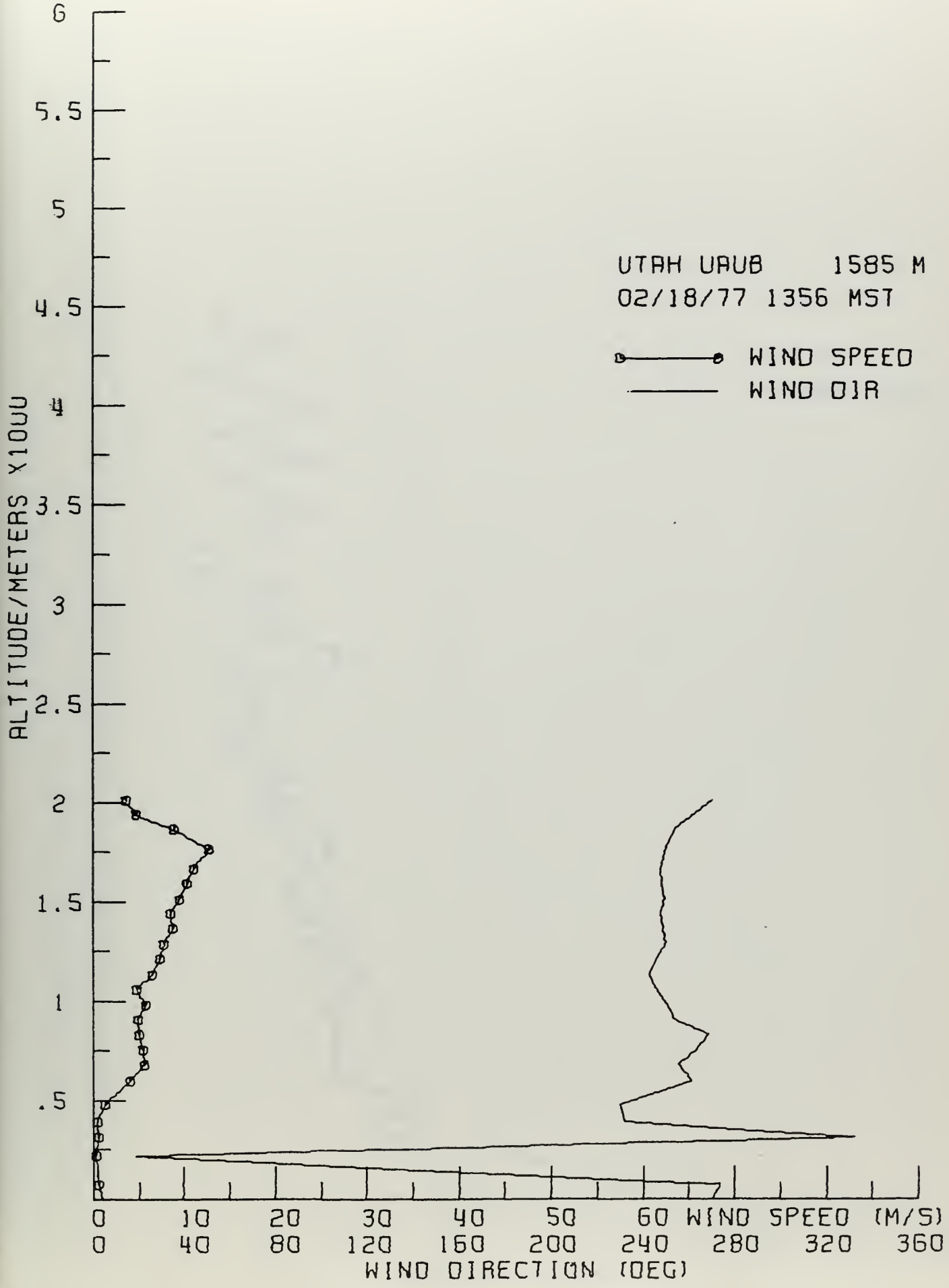

UTAH UAUB 1585 M
02/16/77 1349 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

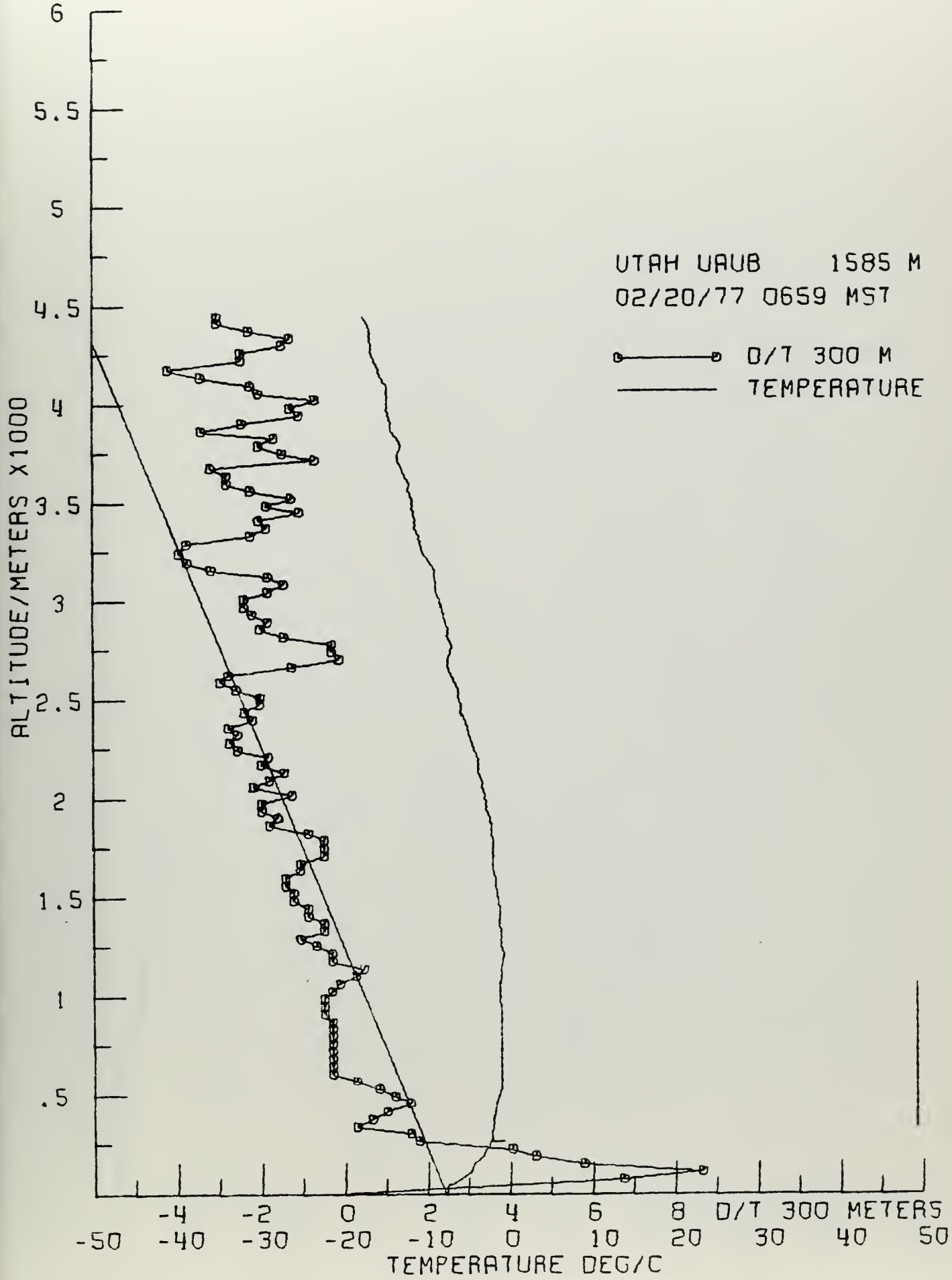

UTAH UAUB 1585 M
02/16/77 1349 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

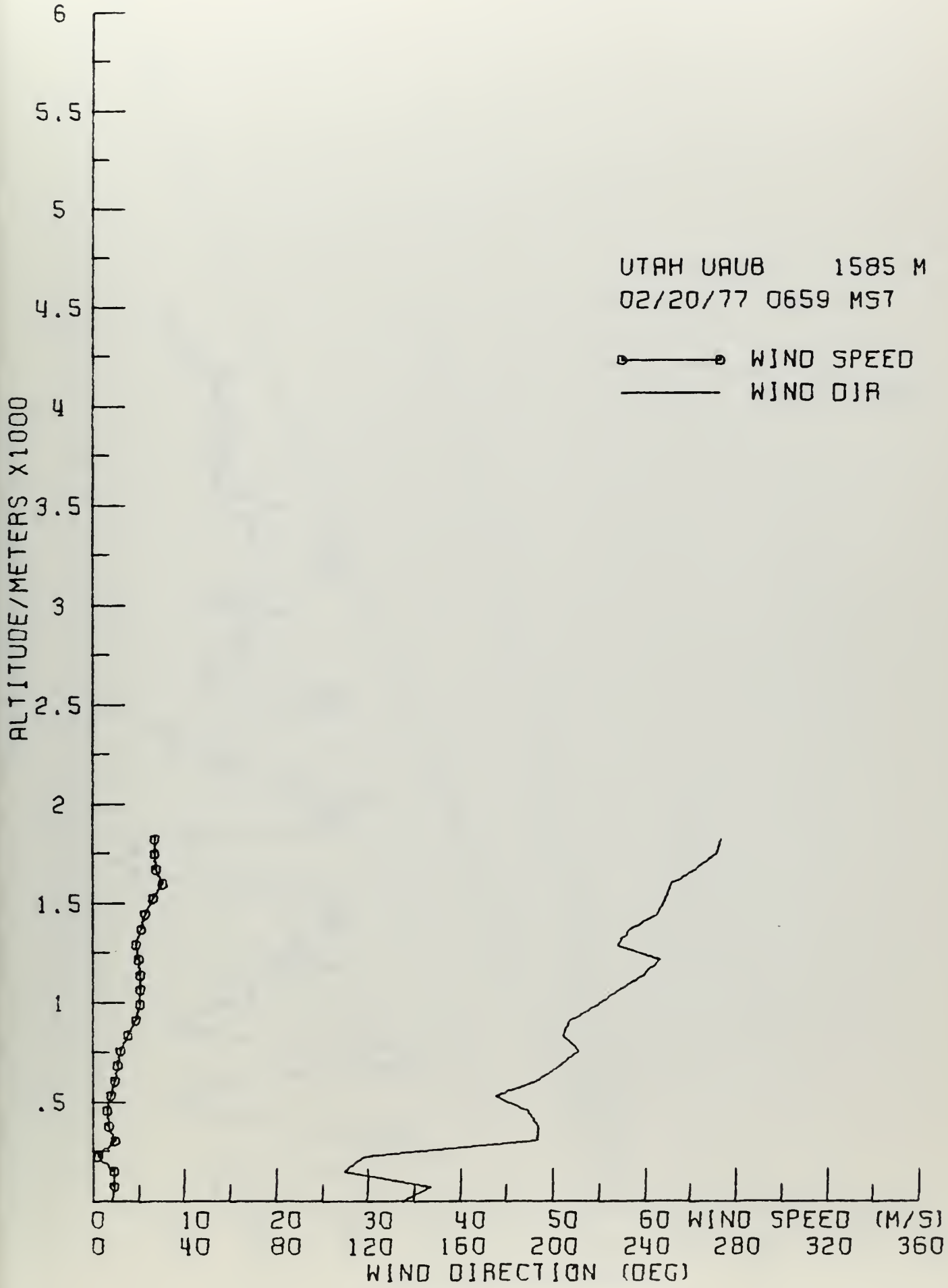

UTAH UAUB 1585 M
02/18/77 0714 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

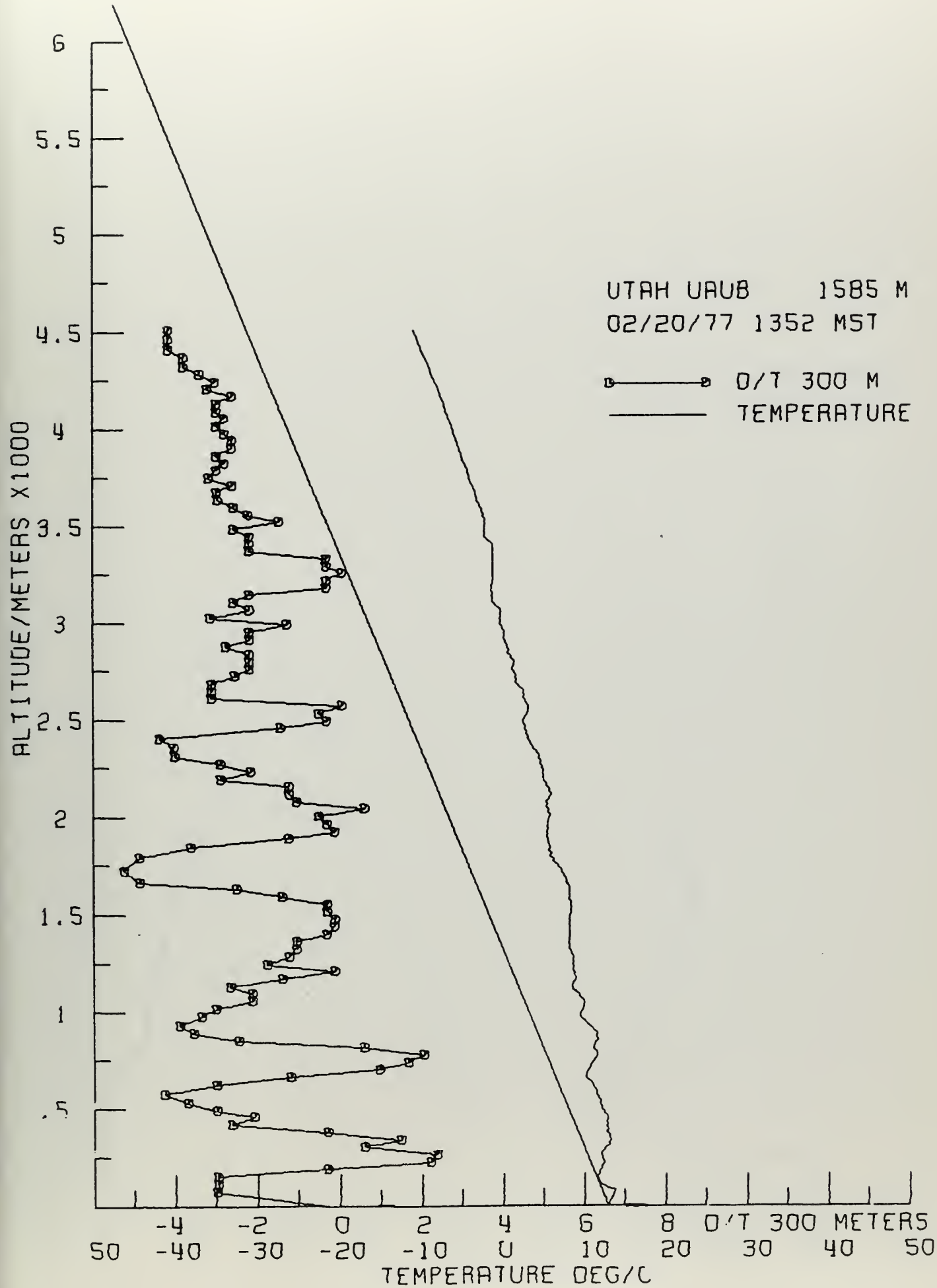

UTAH UAUB 1585 M
02/18/77 0714 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

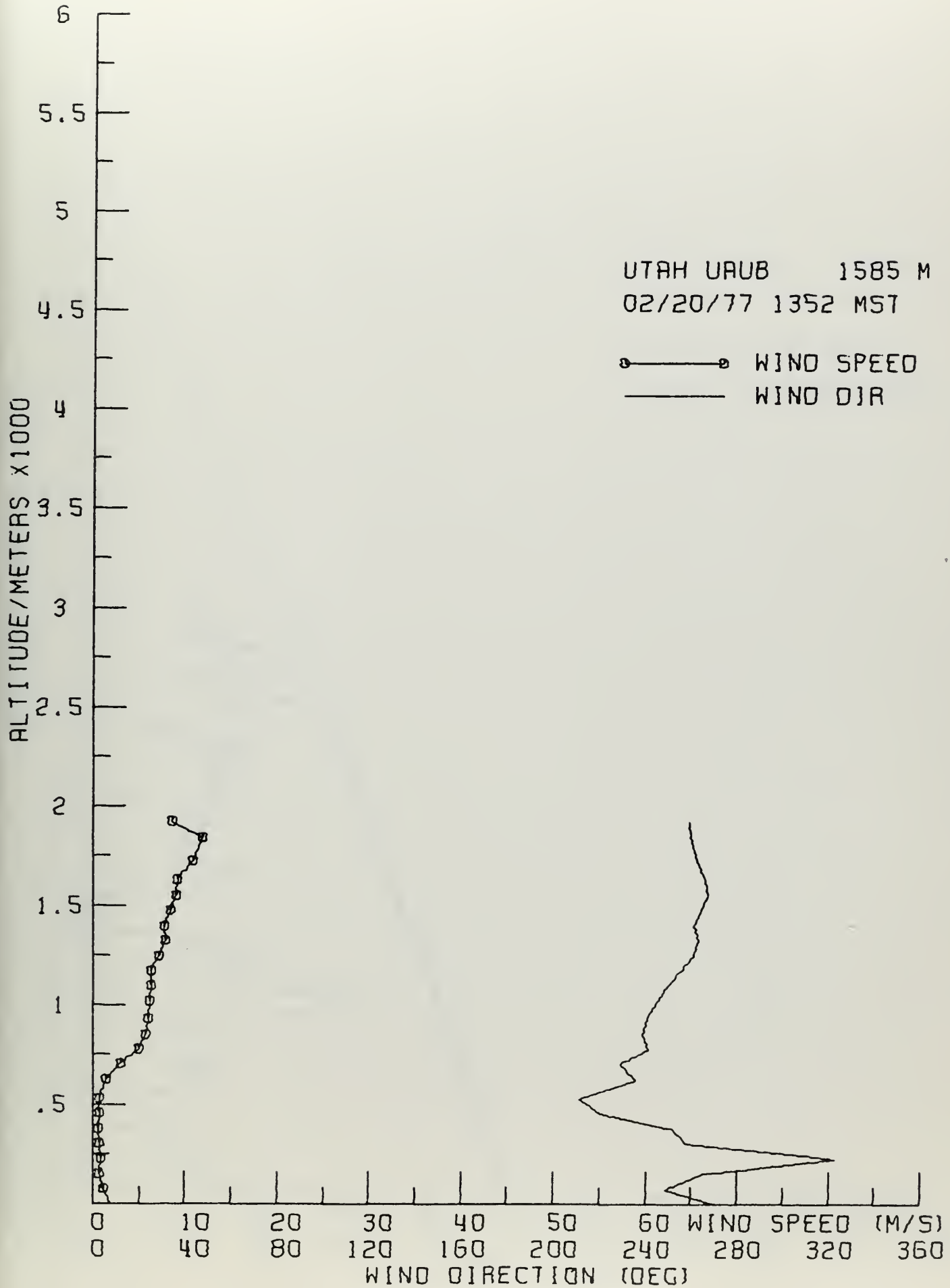

UTAH UAUB 1585 M
02/18/77 1356 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

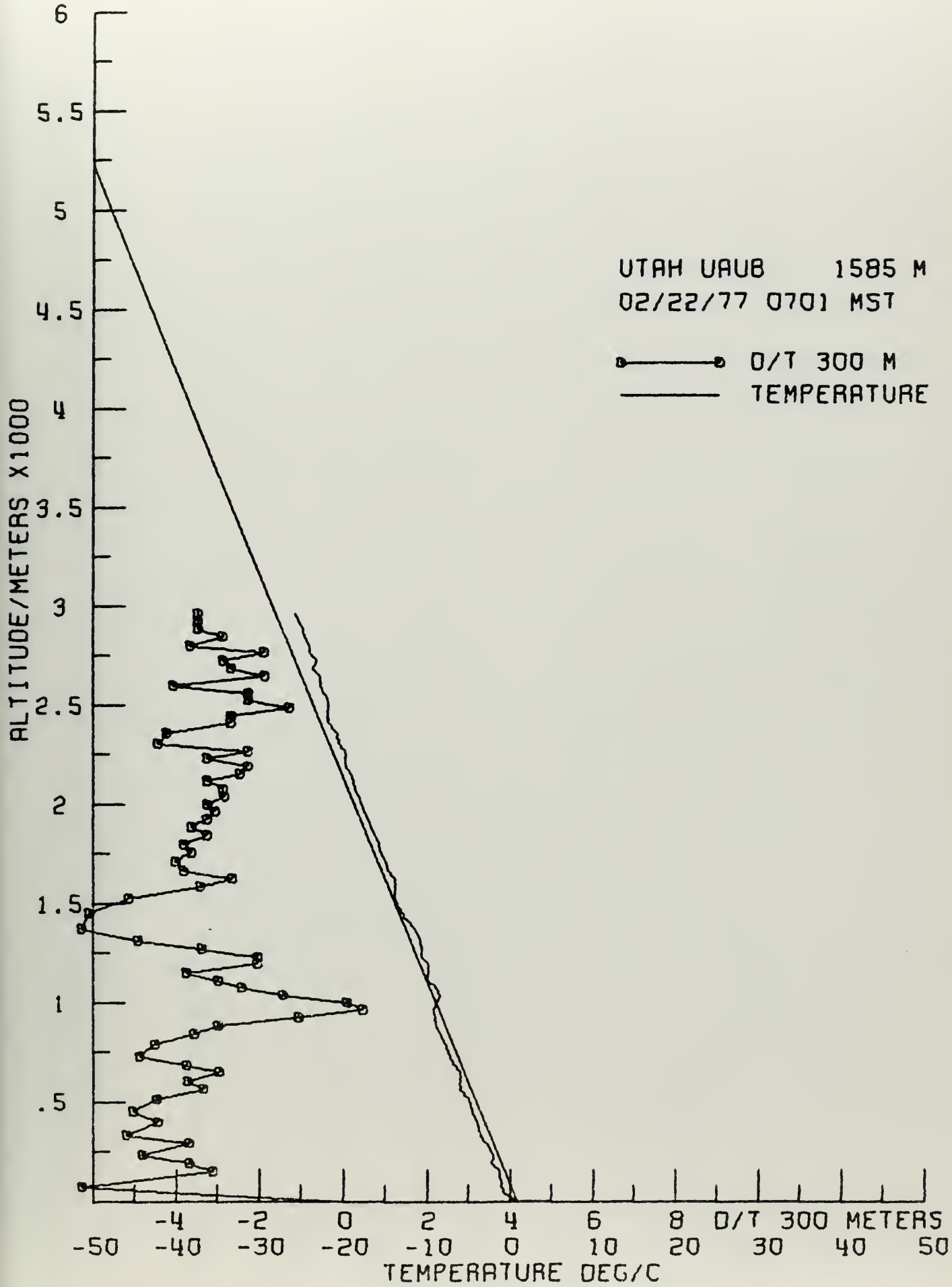

UTAH UAUB 1585 M
02/18/77 1356 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

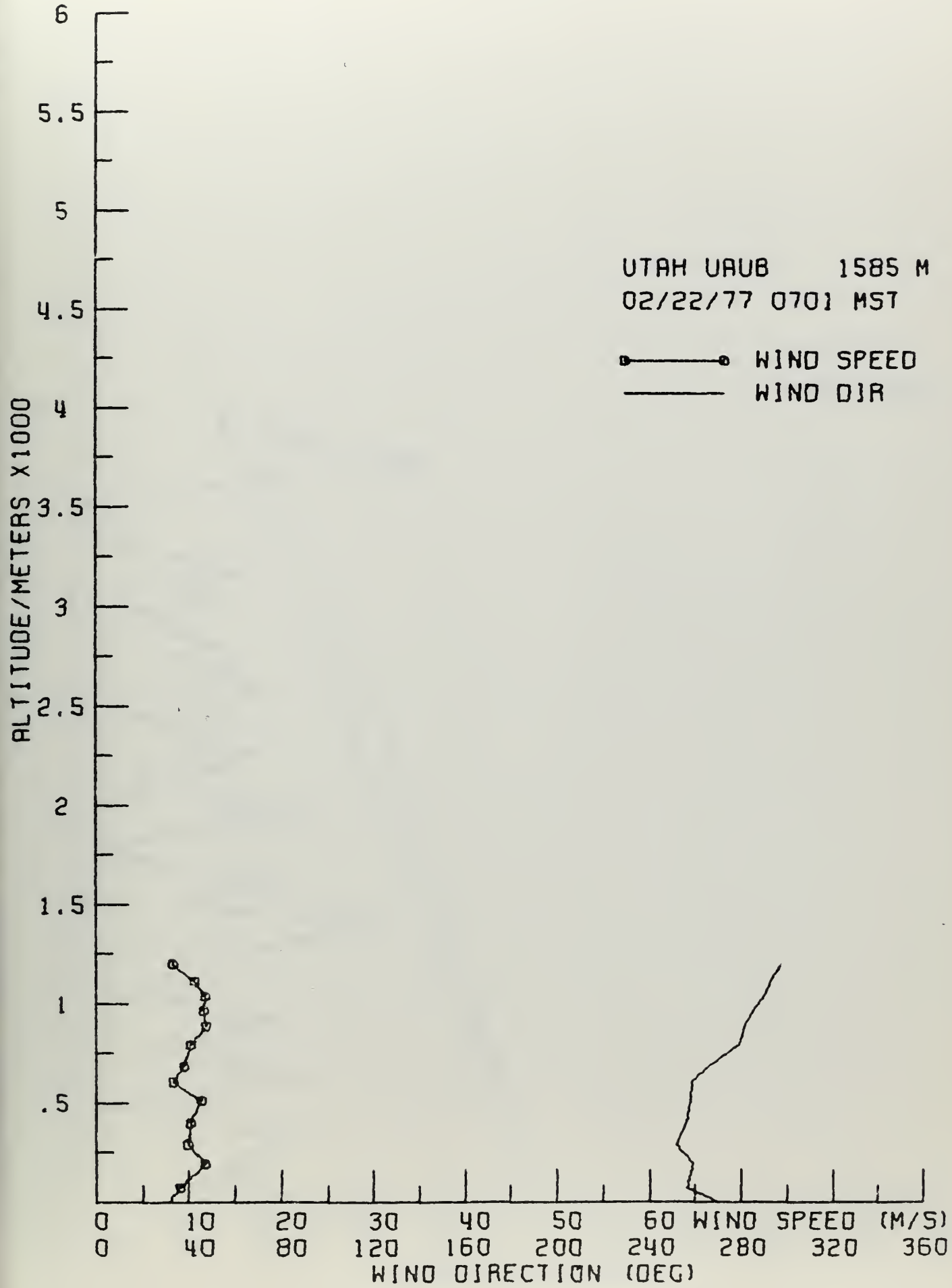

UTAH UAUB 1585 M
02/20/77 0659 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

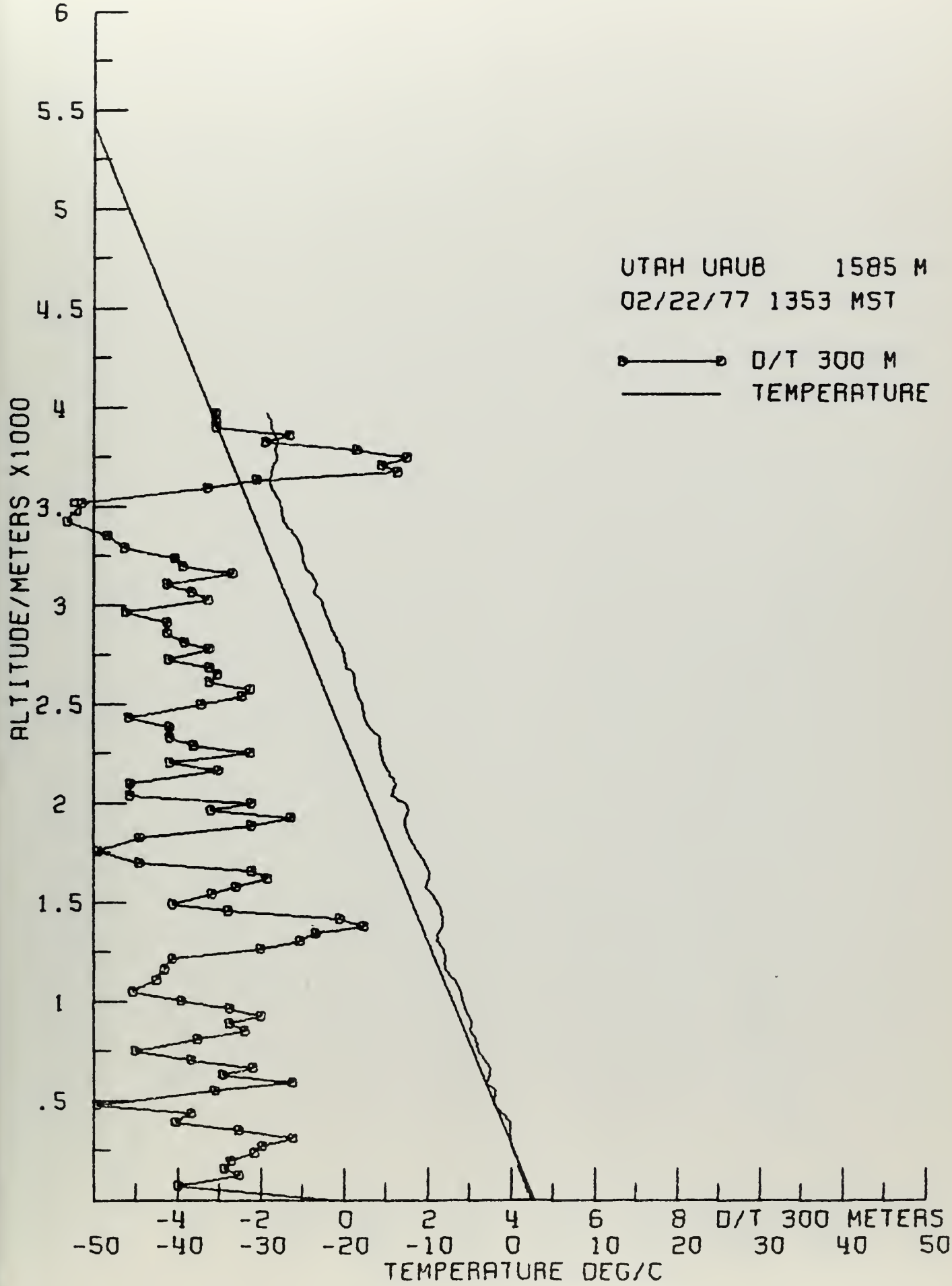

UTAH UAUB 1585 M
02/20/77 0659 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

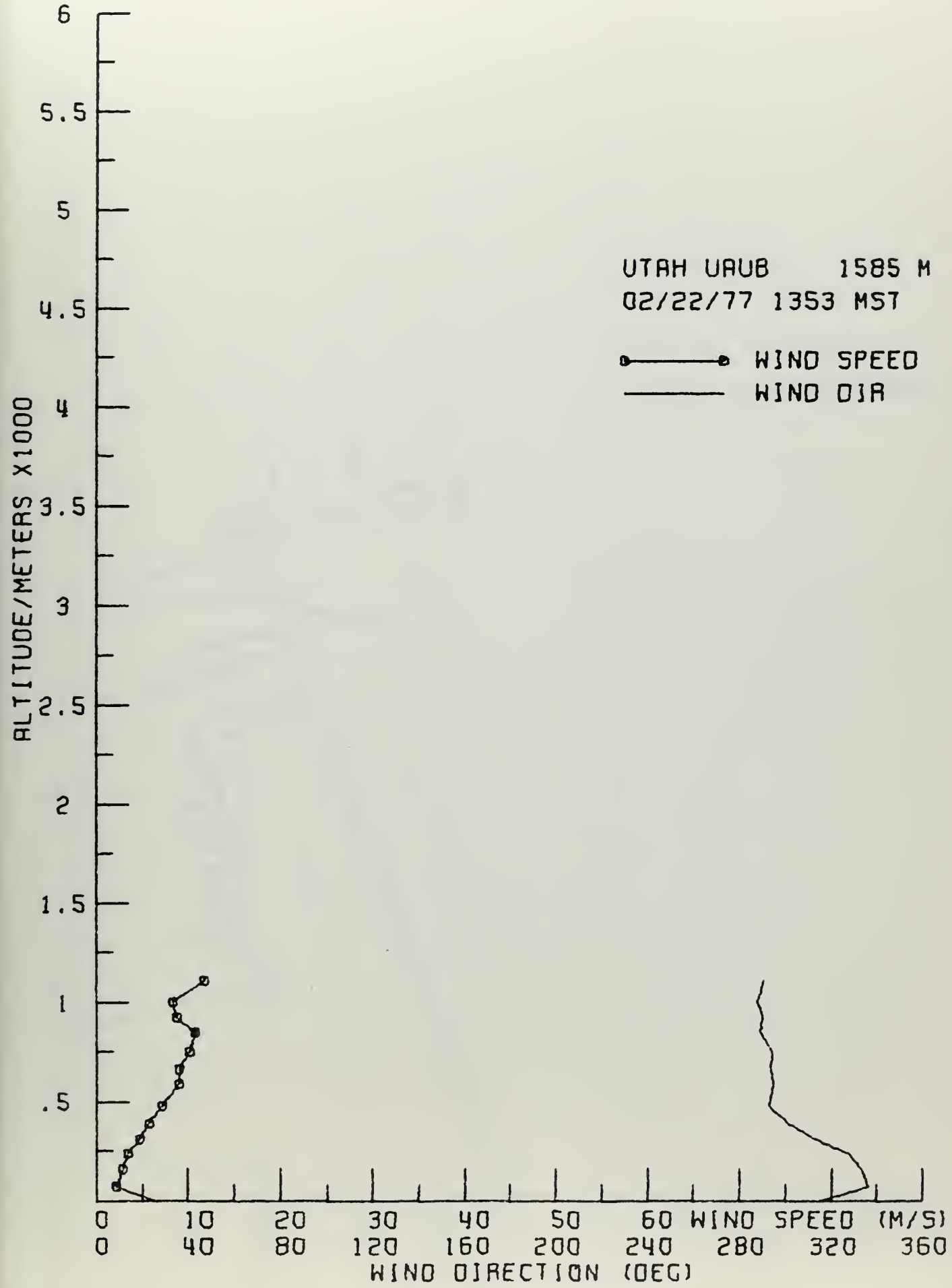

UTAH UAUB 1585 M
02/20/77 1352 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

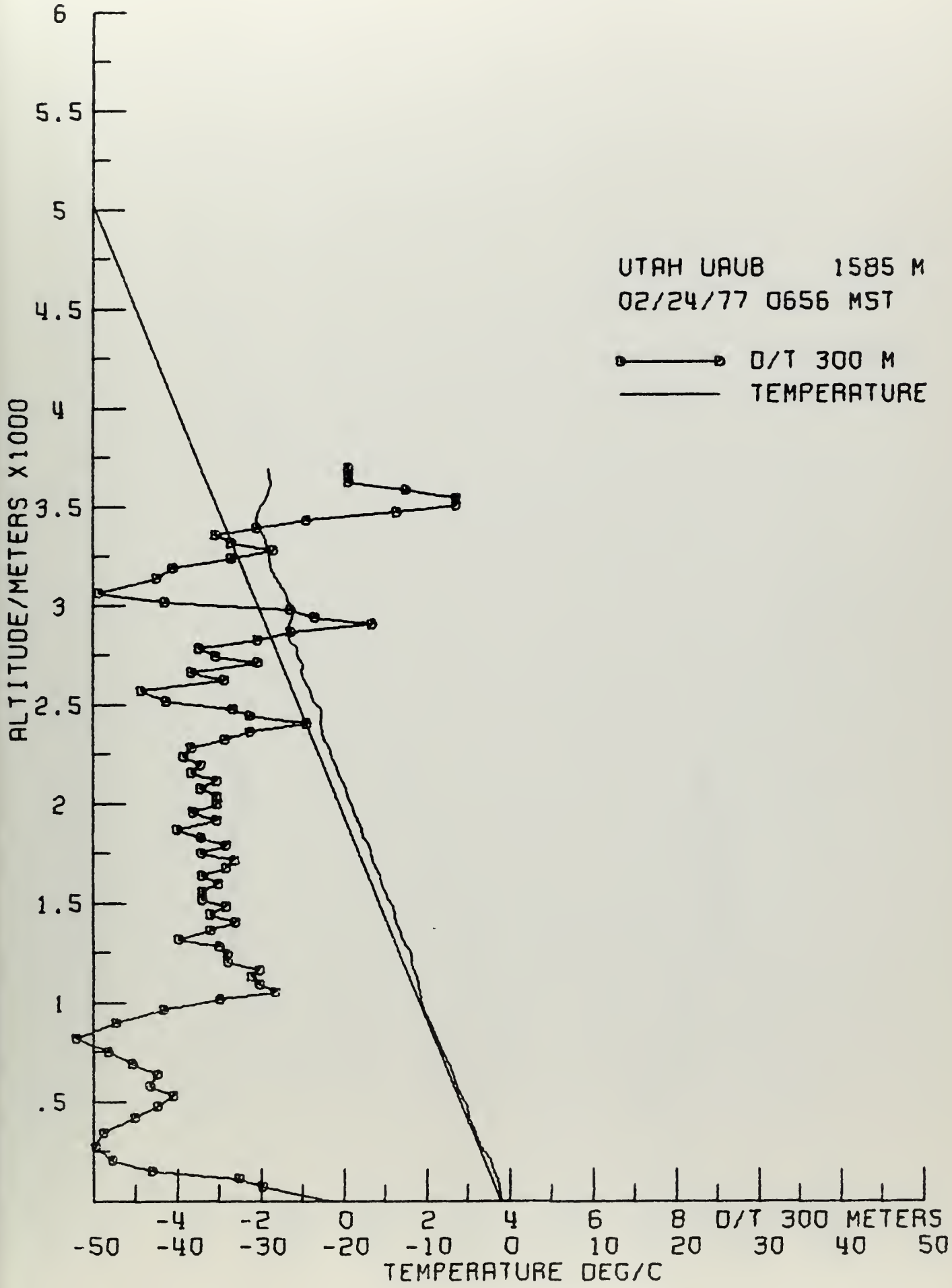

UTAH UAUB 1585 M
02/20/77 1352 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

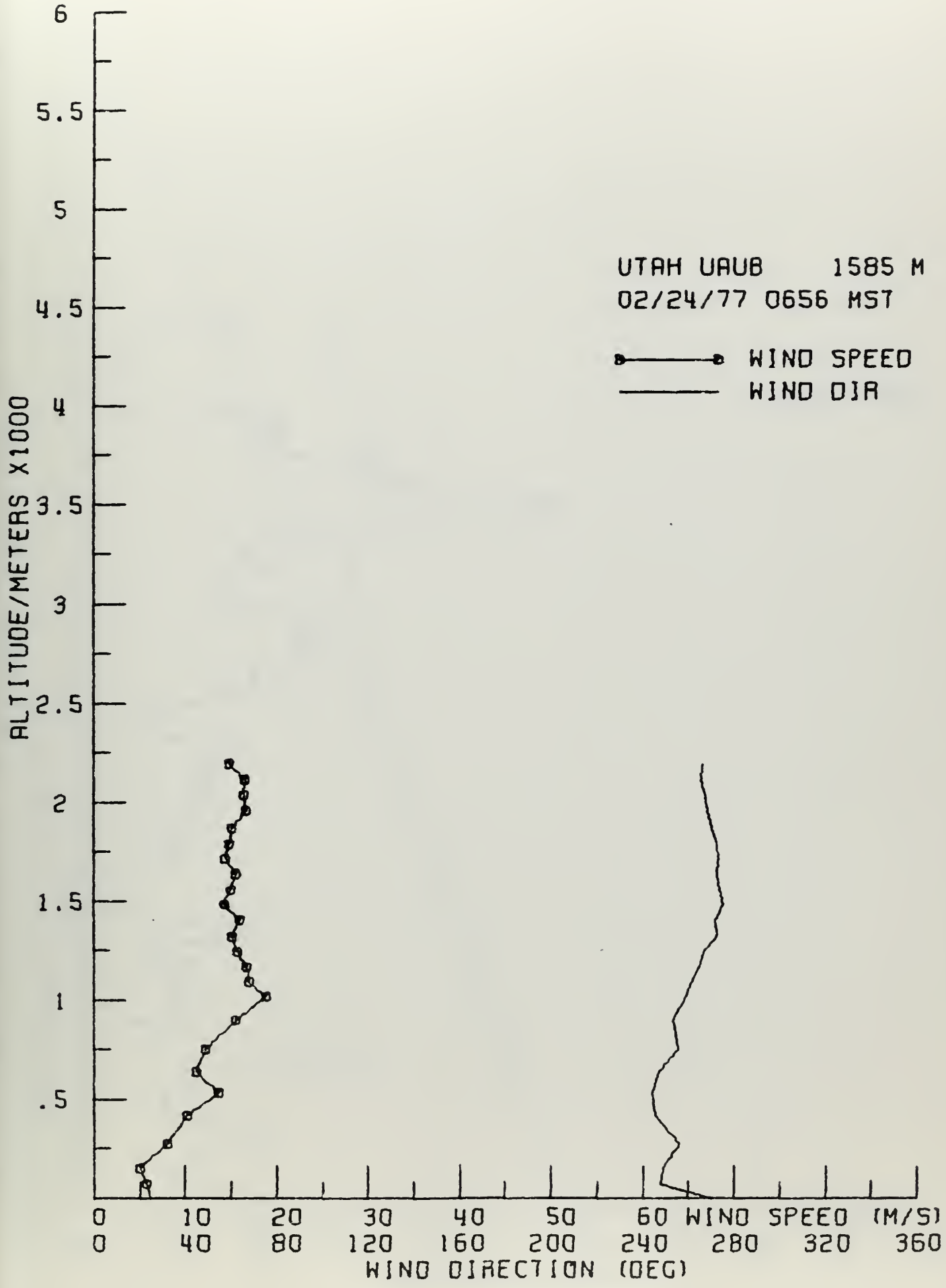

UTAH UAUB 1585 M
02/22/77 0701 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

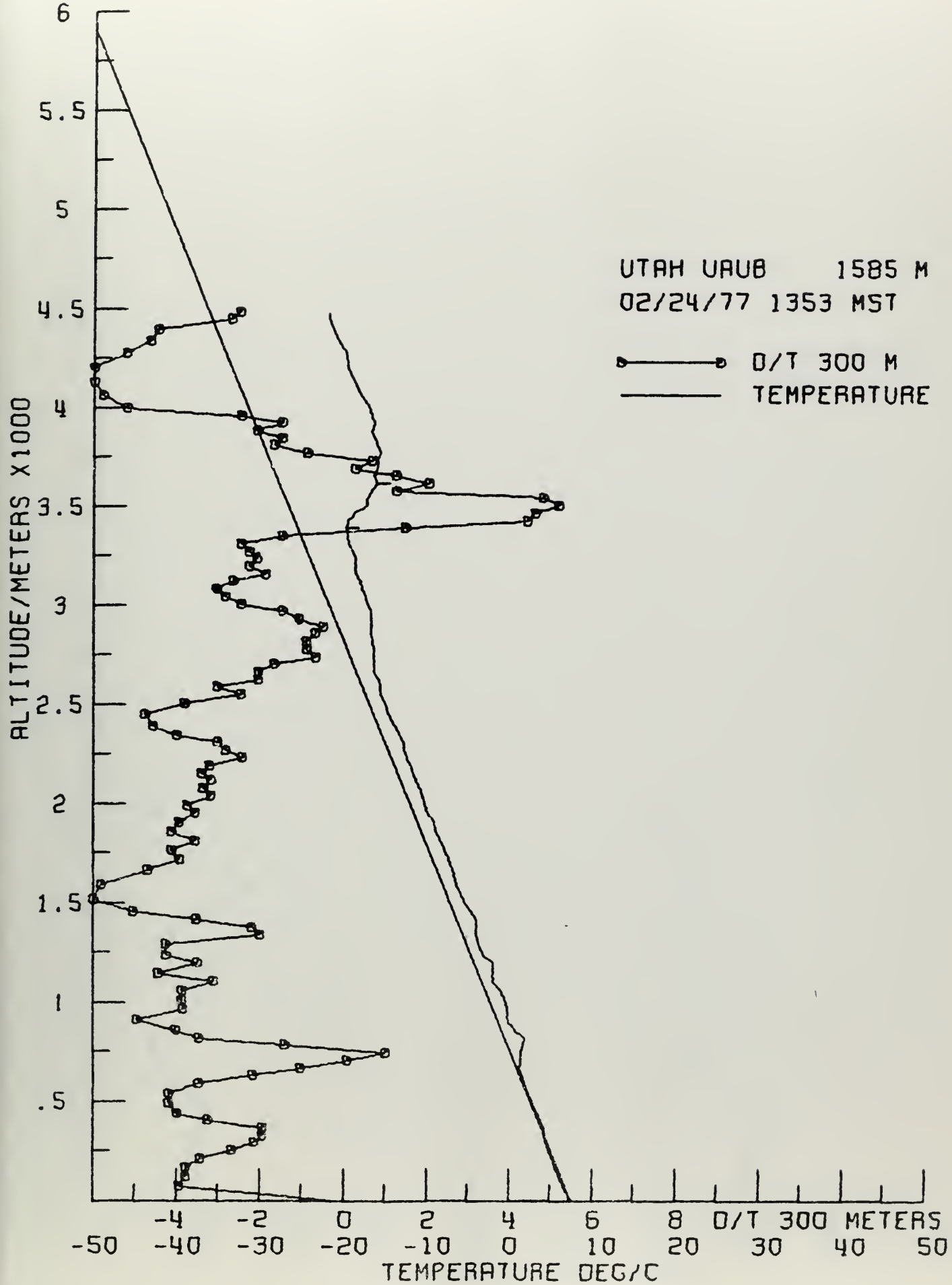

UTAH UAUB 1585 M
02/22/77 0701 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

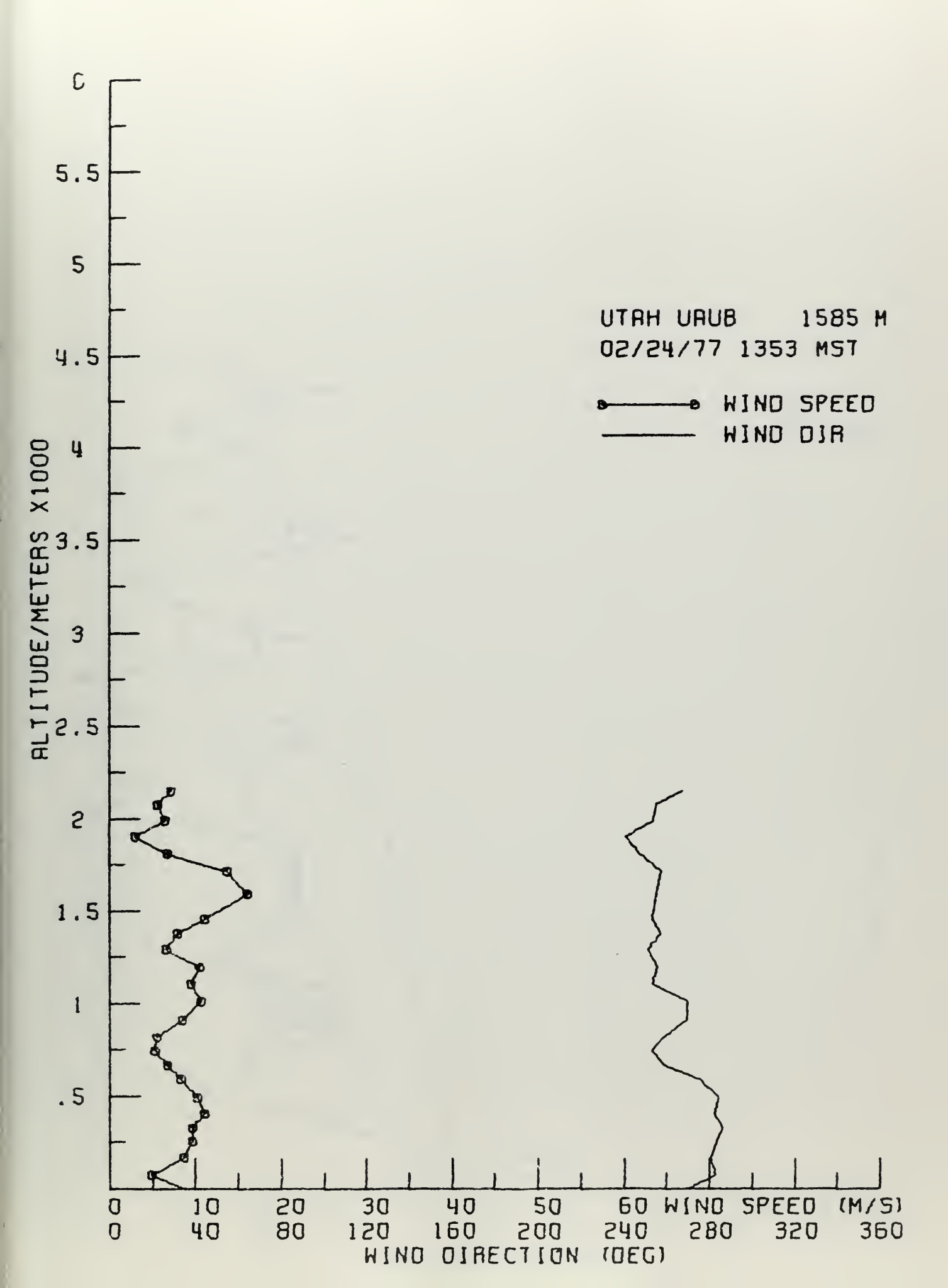

UTAH UAUB 1585 M
02/22/77 1353 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

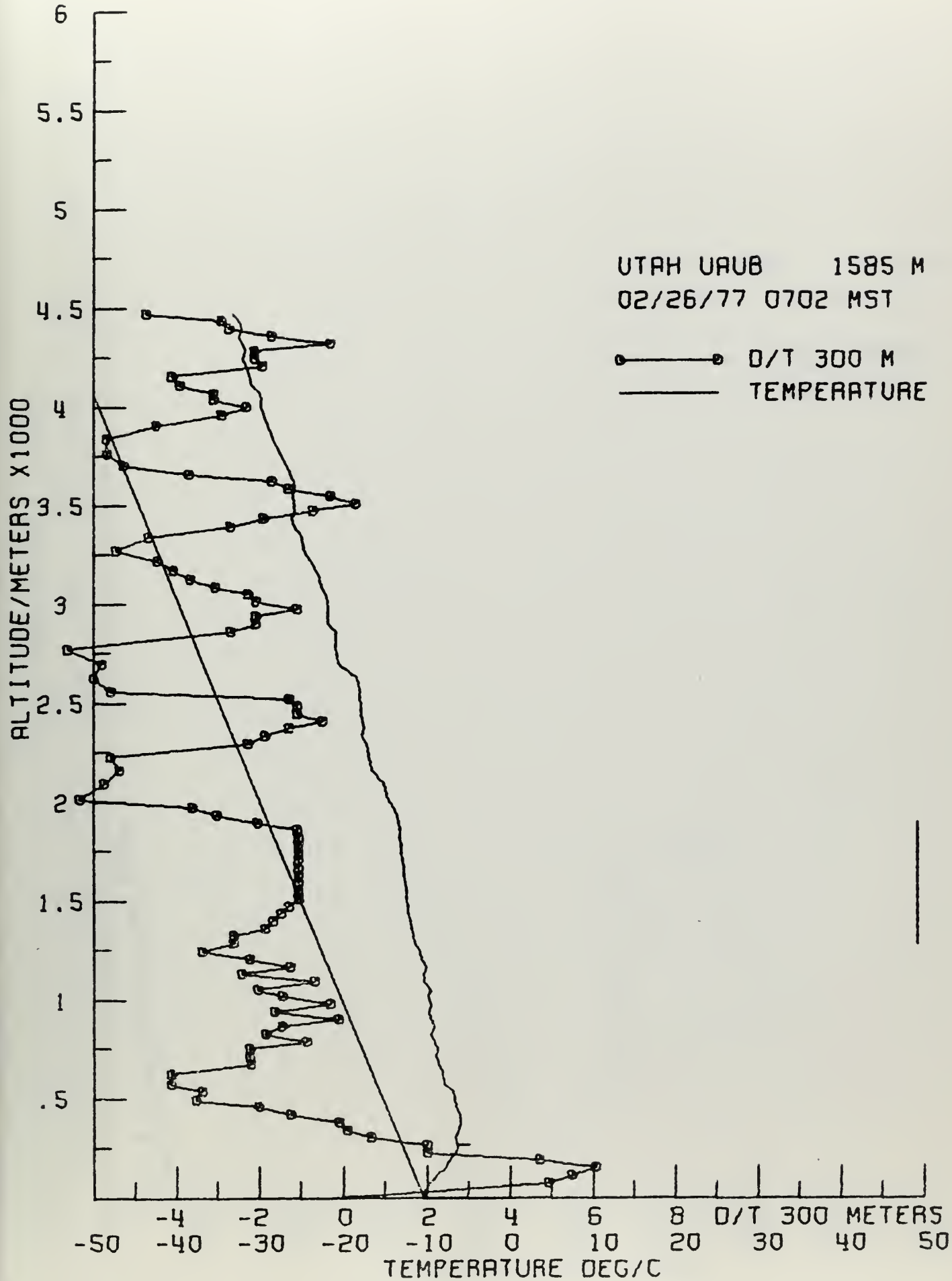

UTAH UAUB 1585 M
02/22/77 1353 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

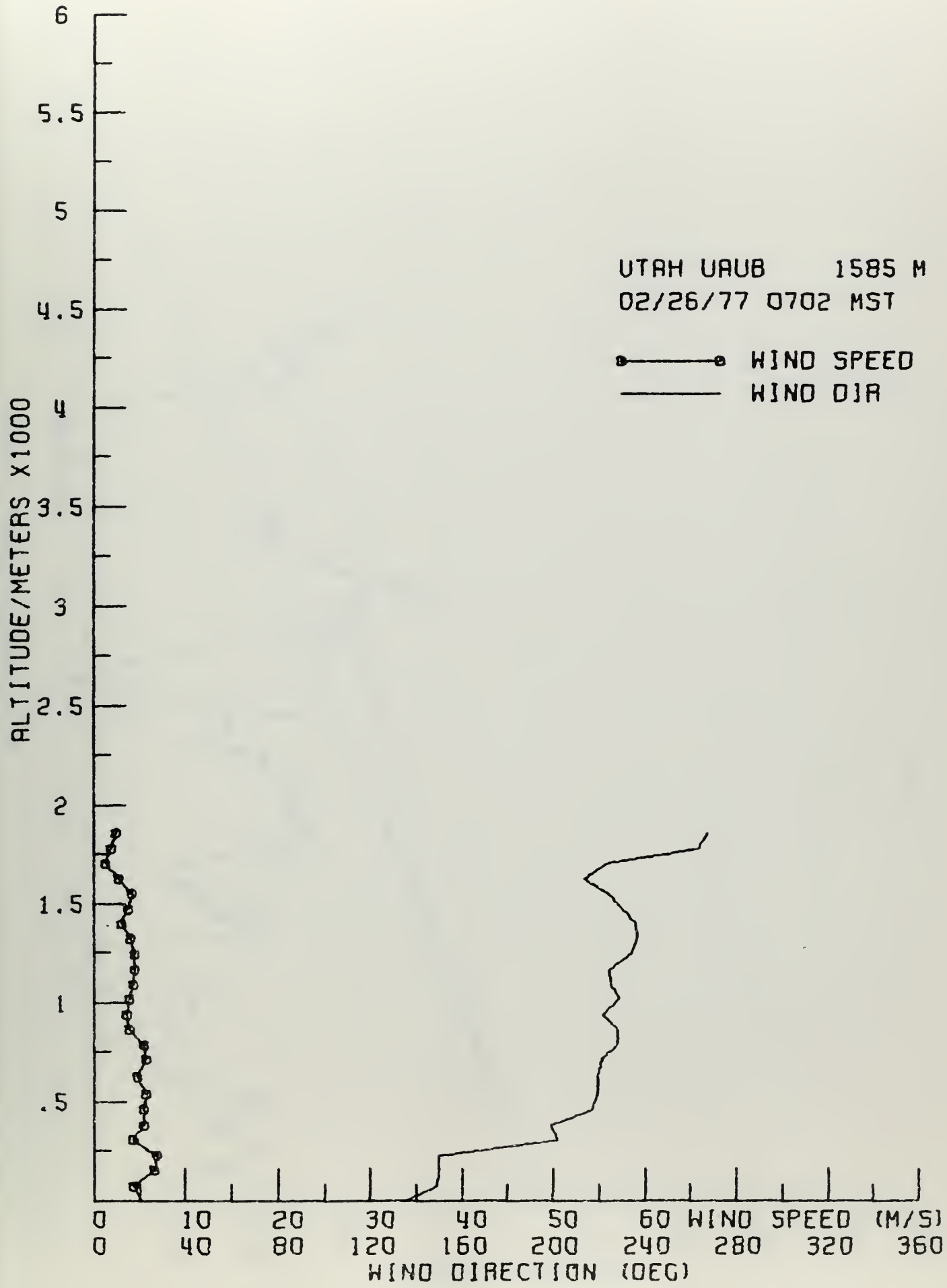

UTAH UAUB 1585 M
02/24/77 0656 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

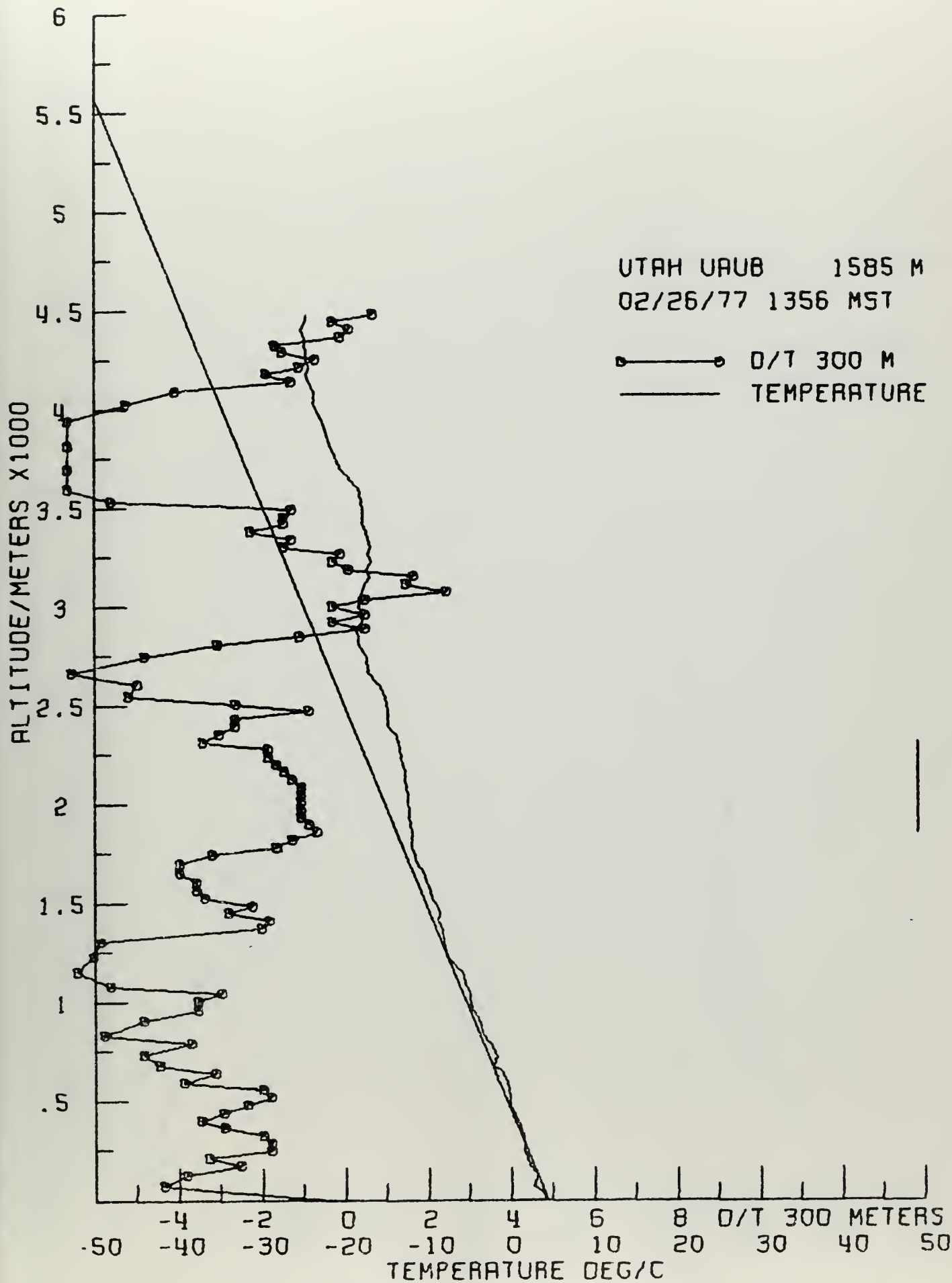

UTAH UAUB 1585 M
02/24/77 0656 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

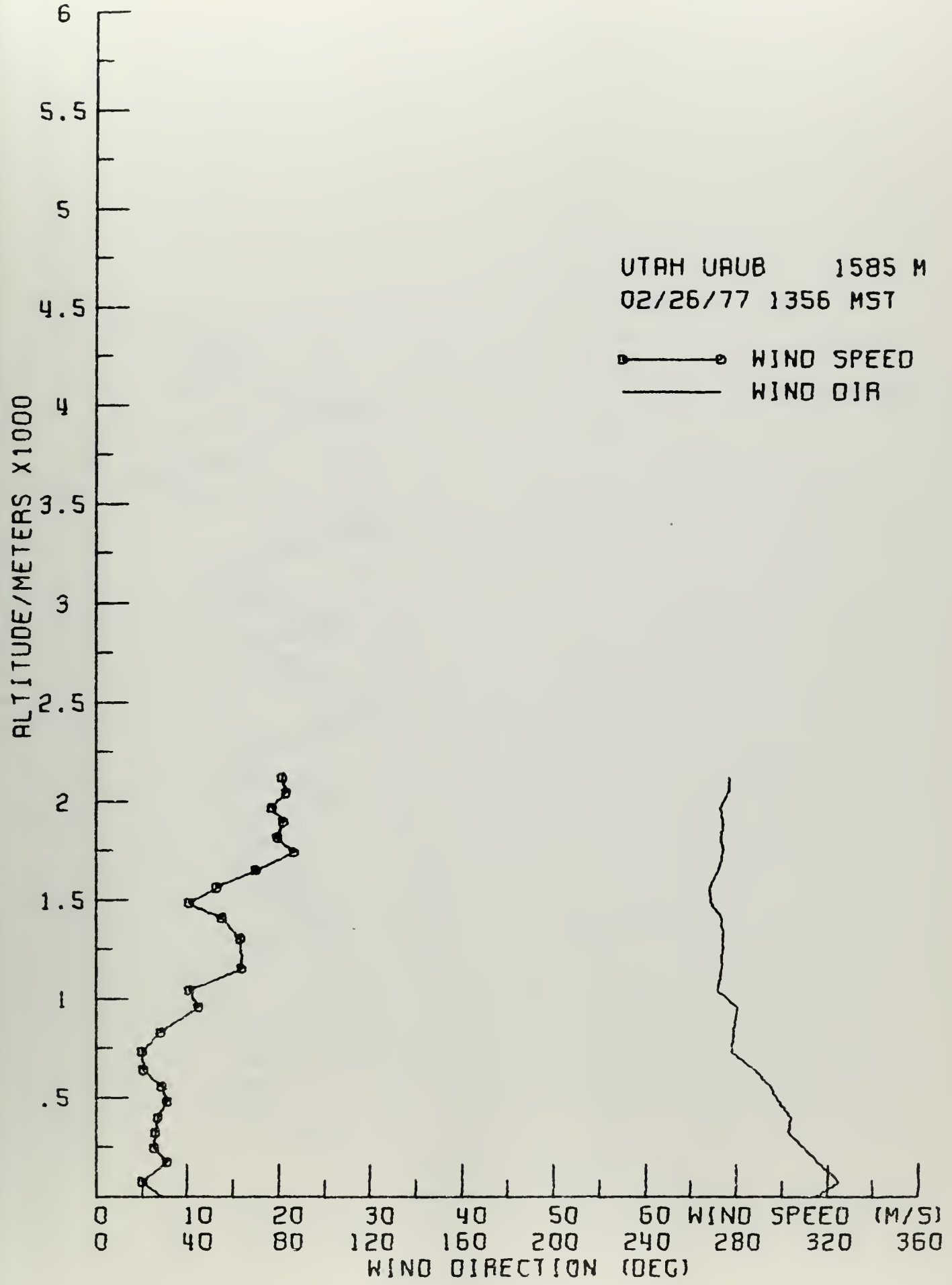

UTAH UAUB 1585 M
02/24/77 1353 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

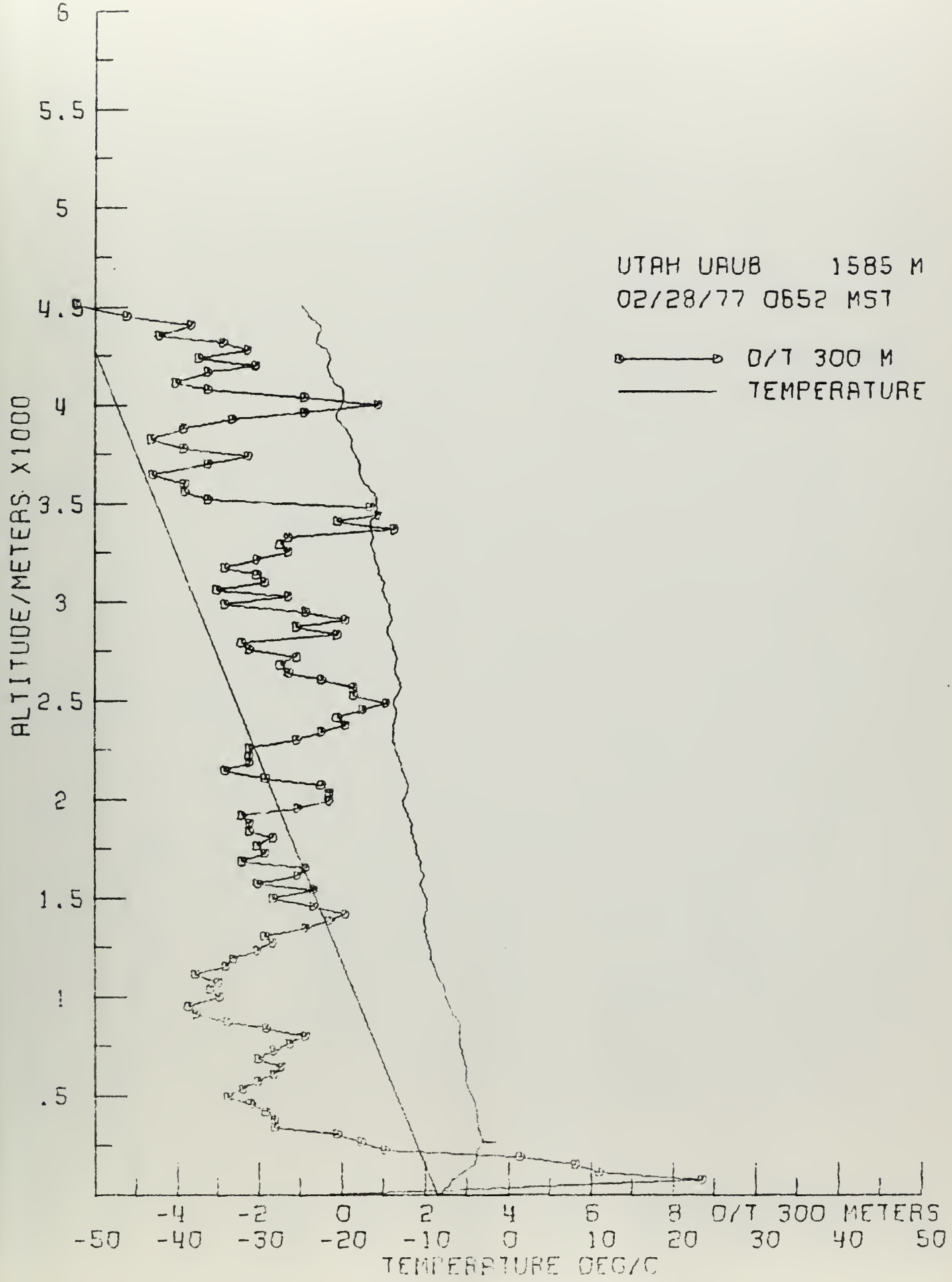

UTAH UAUB 1585 M
02/24/77 1353 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
0
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

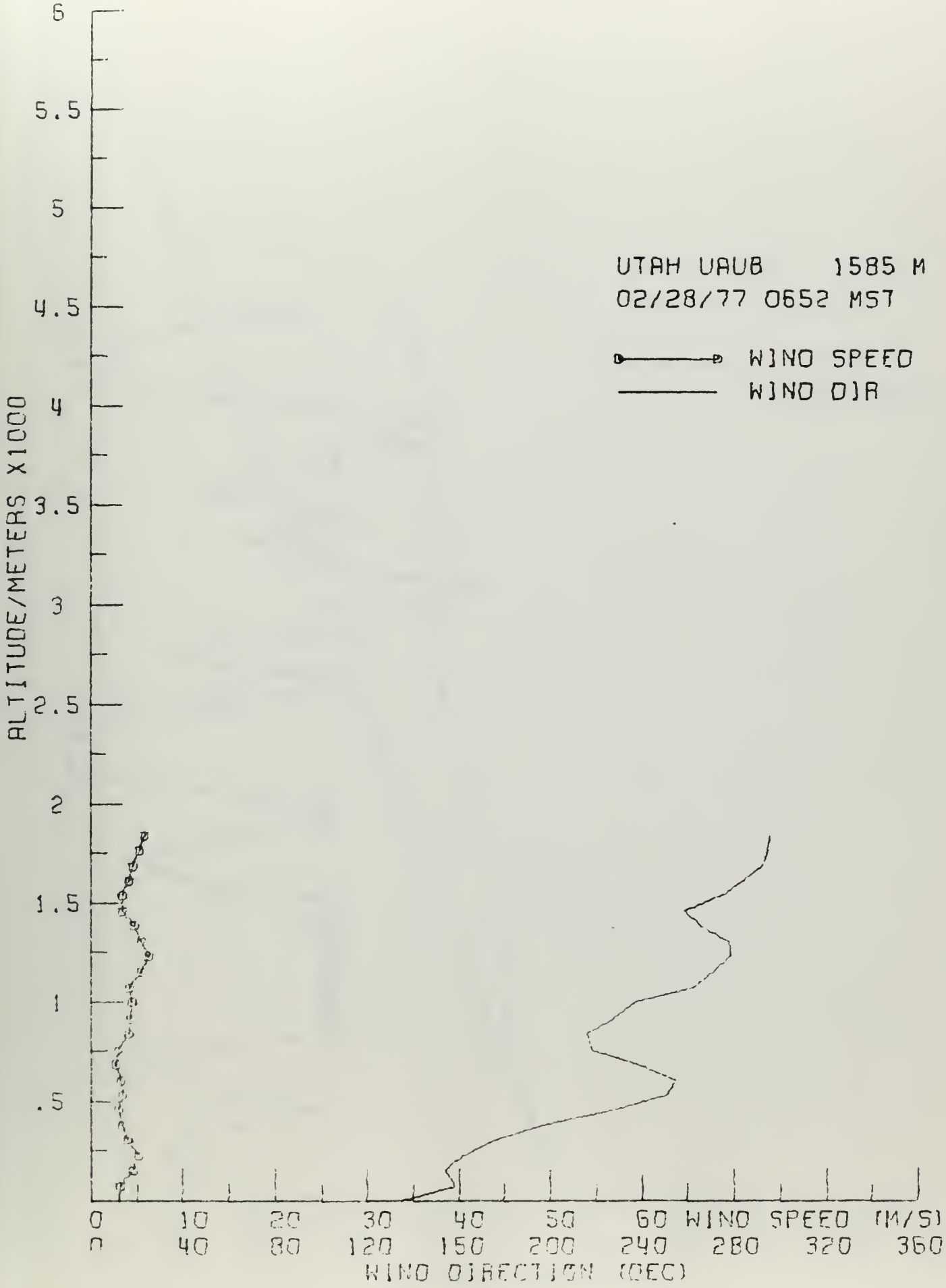

UTAH UAUB 1585 M
02/26/77 0702 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

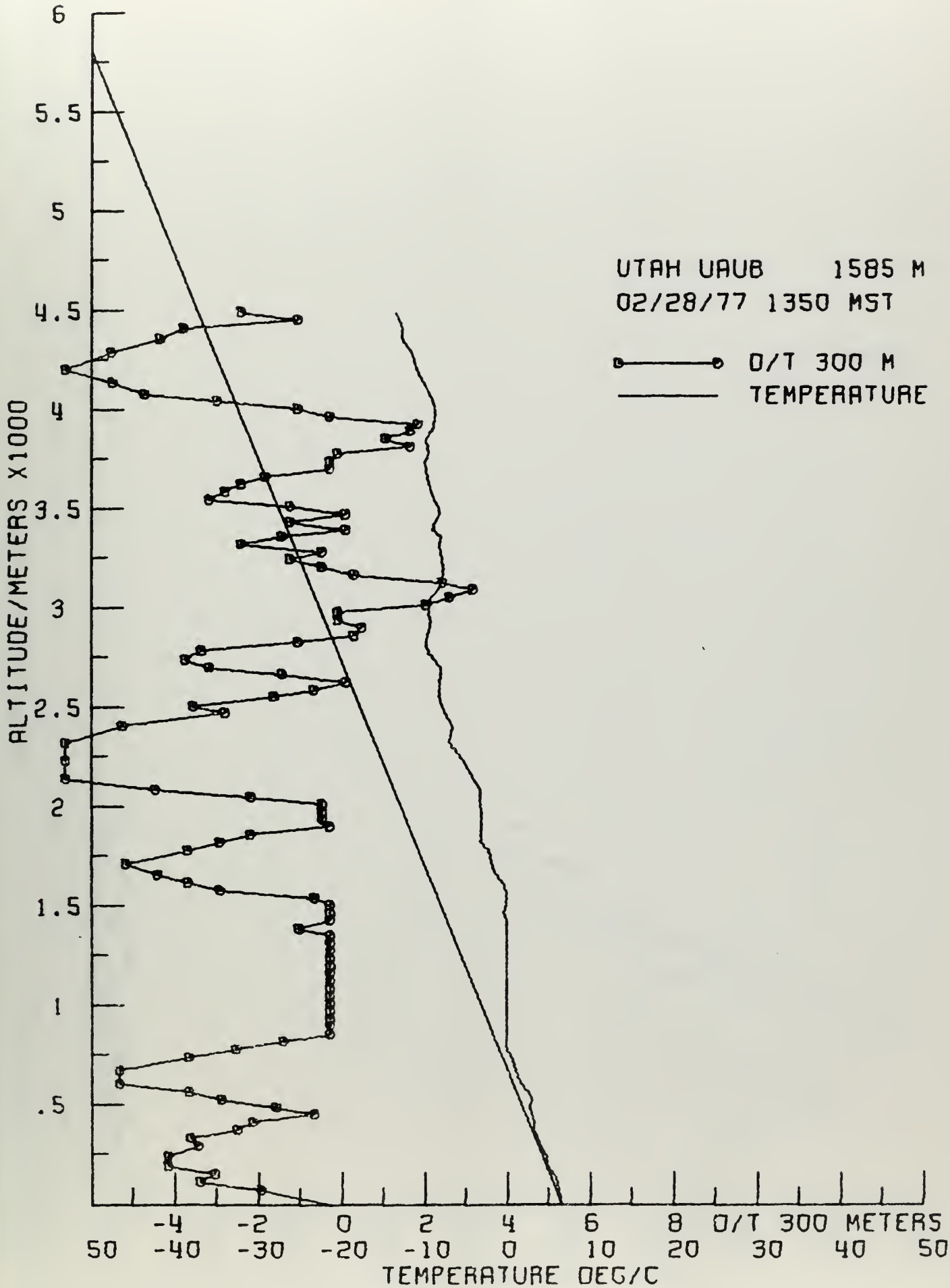

UTAH UAUB 1585 M
02/26/77 0702 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

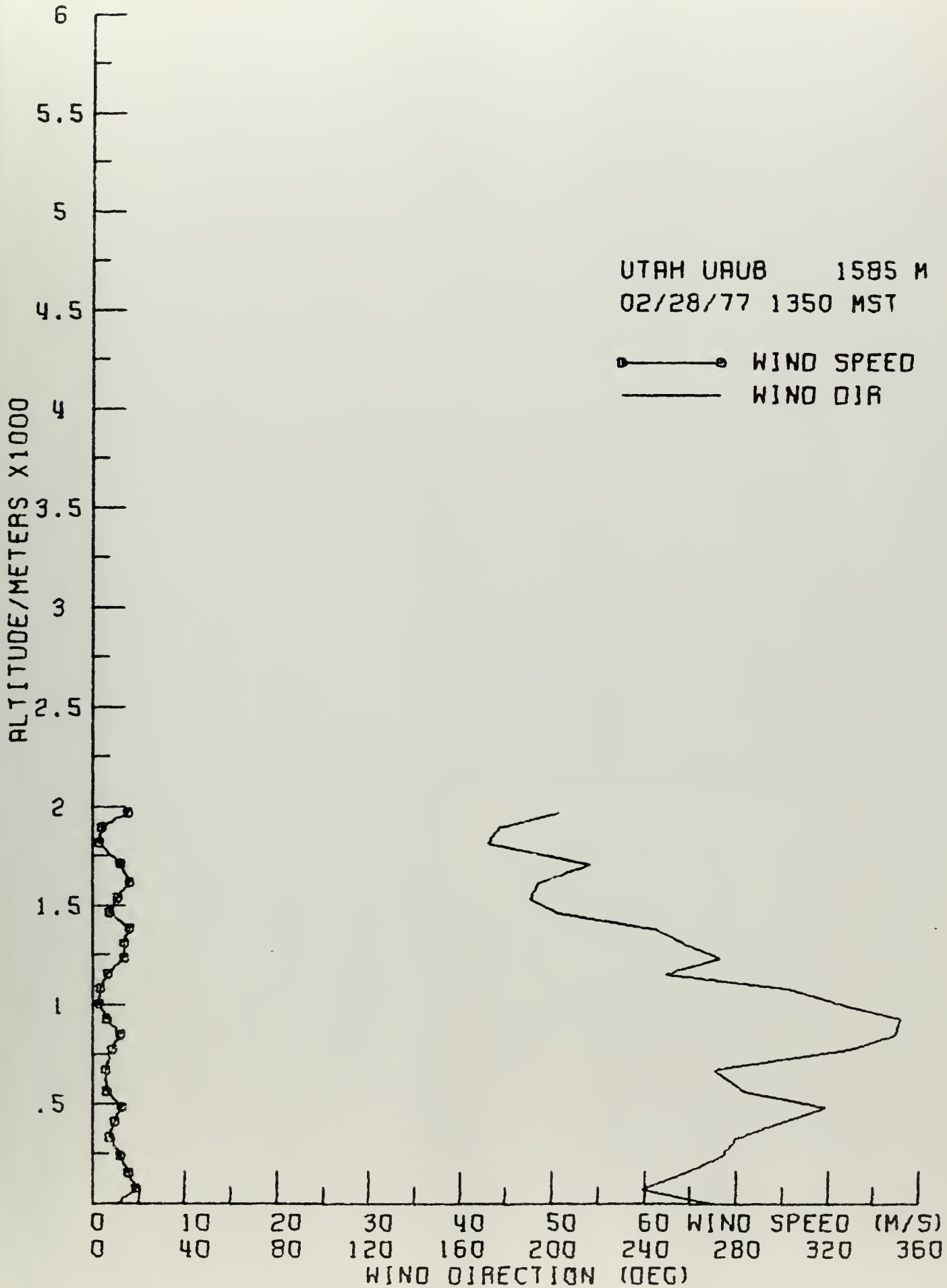

UTAH UAUB 1585 M
02/26/77 1356 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

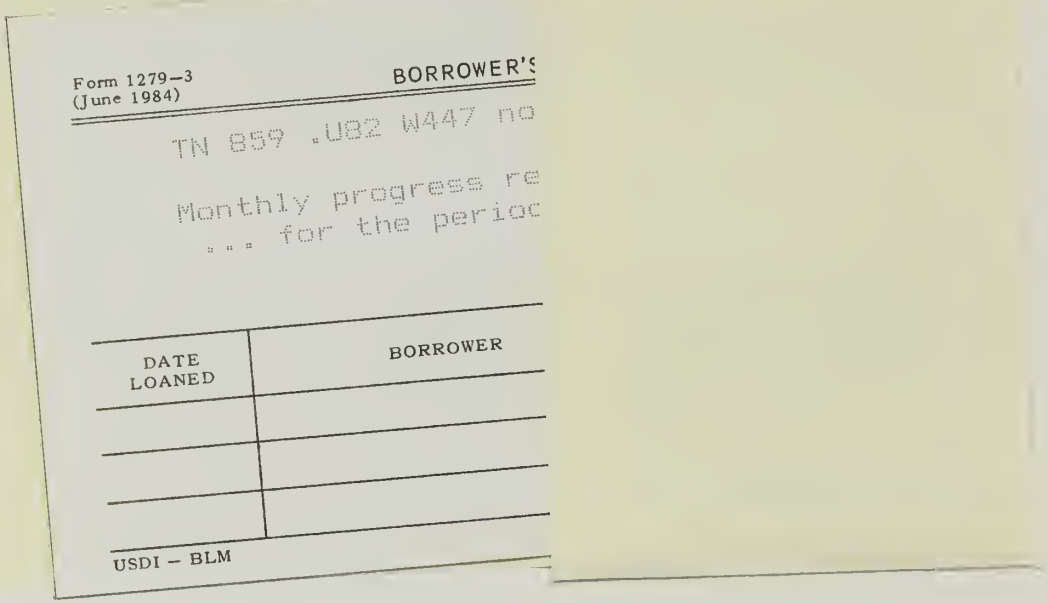

UTAH UAUB 1585 M
02/26/77 1356 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
02/28/77 0652 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
O/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
02/28/77 0652 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 150 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
02/28/77 1350 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
02/28/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)



Form 1279–3
(June 1984)

BORROWER'S

TN 859 .U82 W447 no

Monthly progress re
... for the perioc

DATE LOANED	BORROWER

USDI – BLM

RECEIVED

JUN 14 1977

OFFICE OF
AREA OIL SHALE SUPERVISOR
U.S. G.S.